IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF GEORGIA ATLANTA DIVISION

WILLIAM SHOCKLEY,

Plaintiff,

CIVIL ACTION FILE

VS.

NO. C81-1431A

COX ENTERPRISES, INC., and

ROGER WITHERSPOON,

Defendants.

Deposition of WILLIAM SHOCKLEY, taken on behalf of the Defendants, pursuant to agreement of counsel, in accordance with the Federal Rules of Civil Procedure, before Marcia A. Welch, Certified Court Reporter and Notary Public, at 3400 First Atlanta Tower, Atlanta, Georgia, on the 25th and 26th of March, 1982, commencing at the hour of 10:00 o'clock a.m.

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APPEARANCES OF COUNSEL:

On behalf of the Plaintiff:

J. WALTER COWART, Est.

On behalf of the Defendants:

TERRENCE B. ADAMSON, Ear. DAVID J. BAILEY, Eas.

MR. ADAMSON: Dr. Shockley, as you know, I am Terry Adamson, an attorney with Hansell, Post, Brandon & Dorsey. I represent the Defendants in this action, Cox Enterpriser, Inc., and Mr. Witherspoon.

Mr. Bailey is also an attorney with Hansell, Post, Brandon & Dorsey and also obviously represents the Defendants in this action.

I might state that neither Mr. Esiley nor I are physicists or geneticists. As a result, we are going to be asking questions that may, during the course of the day, may seem to you somewhat naive, you know, in our attempt to understand some of the things that you are about and what you have been talking about. I hope, since we have not passed a screening test by you or your associates, I hope you will bear with us as

we proceed in that direction.

If, for any reason, you do not understand a question that I ask, don't hesitate to ask me to clarify it and I'll do my best. We have a lot of material to cover, as you know.

We have received a lot of newpaper articles and documents over the last month, most of which arrived last week. We have made an effort to review those in preparation for this deposition.

It may be, at times, we seem a bit disorganized in trying to reference particular documents but, again, I ask for your patience while we try to do that.

As you know, Mr. Cowart and Mr. Bailey and I have engaged in some correspondence over the production of documents. As I say, most of the newspaper articles that you submitted arrived just last week.

As you know, Paragraph 7 of our first request for production of documents asked for any and all documents identified in response to Interrogatory No. 5-E of Defendants' first interrogatories, among others.

Interrogatory 5-E states, "Identify each and every document published in connectin with or as a result of any interview by any representative of the media other than Defendant, Roger Witherspoon. regarding your views on race, genetics, dysgenics, the statistical IQ of American negroes, voluntary sterilization or other similar subjects."

We received an initial small package from you of documents. We happened upon an article in <u>Esquire</u> magazine which referred to hundreds of multilith reprints and newspaper articles and the like. We have corresponded about that.

we have received additional documents and certainly one question we have is have you complied, to the best of your knowledge, fully and completely with the full request for the production of documents of each and every article concerning the subjects that were stated in that interrogatory?

THE WITNESS: I have complied with it. My understanding of the most recent communication making reference to the <u>Esquire</u>

article is -- there are shelves in our office which contain file pockets and these file pockets contain multilith material that bears numbers appearing in the upper right-hand corner.

Mr. Bailey's last request was transmitted two weeks ago from Mr. Cowart to me and Mrs. Shockley and I went through those file pockets and endeavored to select everything that met the criteria which I understood to be a publication, not necessarily a manuscript of my own which has never been published, and went through this entire collection and made a selection.

I would not guarantee that this is perfect.

MR. ADAMSON: But to your best effort, this is --

THE WITNESS: We satisfied the criteria that was specified by reference to the Esquire article.

MR. ADAMSON: Needless to say, should additional articles come to mind or come to your attention in the future, that is a continuing request and I assume that would

be made available to us?

MR. COWART: I'm going to ask him, if it's all right with you, in a minute about why he did not comply at first, but I think the reference back from the notice to produce to interrogatories was a bit confusing, if you understand what I mean, and the motion to produce or the notice to produce did not, I don't believe, specifically state that. Again, it referred back to the interrogatory, if I'm not mistaken, 5-B of the interrogatories and so forth, and I believe he may have misunderstood.

MR. ADAMSON: I'm not trying to be critical. I'm trying to establish that we now have everything.

MR. COWART: Why did you not comply eventually as you did at first?

MR. ADAMSON: I have no real interest in that. At this point, I think we know the dates that the compliance took place as a matter of record and what we are trying to do is establish, at this time, that there has been full compliance to the best of his knowledge, just as a preliminary matter.

I do repeat the need for continuing supplementation if there are additional documents that come to mind.

MR. COWART: May I ask if we are going to have waiver and so forth?

MR. ADAMSON: Yes. I wanted to talk about the production of documents first and then we'll go into some normal sipulations.

We would prefer that signature not be waived and that signature be required on the deposition.

MR. COWART: It will be sent to you when you get it. When you read it --

THE WITNESS: This is the transcript?

MR. COWART: This is the deposition transcript. You will read it when you get it. If you note anything that is an error, you would just simply note it. In other words, we do not delete anything from the deposition or what has been stated therein.

You note it in your notes as well as possibly some little notation about you didn't say it like that or something, but we do not change anything that is printed. It's

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simply that you note the errors, if there are any errors. There generally are not.

These people are pretty good.

You will sign it, return it, and it will be filed.

MR. BAILEY: This may be the last time I say anything during the course of this deposition, but let me say you will be sent a separate instruction sheet by the court reporter telling you what you have to do. You just follow that, send it back to us as soon as possible and it will be greatly appreciated.

MR. ADAMSON: I assume that Dr. Shockley is aware that this deposition is being taken for any and all purposes that might be used at trial, as well as for discovery?

MR. COWART: Yes.

MR. ADAMSON: Also, we assume the usual stipulations to the extent that all objections are reserved, except as to the form of the question?

MR. COWART: I think so. Depending on where the questioning goes, we may have

some objections but --

MR. ADAMSON: You certainly may state your objection, but if you do not do so or we do not do so, that objection is reserved until some other time as to the form of the question.

(Whereupon, the reading and signing of the deposition by the witness was reserved.)

WILLIAM SHOCKLEY,

having been first duly sworn, was examined and testified as follows:

CROSS-EXAMINATION

BY MR. ADAMSON:

Q Dr. Shockley, have you done anything to prepare for this deposition? Have you reviewed any notes, had any conferences?

A I spent some time reviewing one of the two packets that we sent to you by express mail last week.

Q The packet you are referring to is the collection of articles?

A Yes. I spent some time on just plain reviewing those; otherwise, I spent time recently in adding some of these brief descriptions on the

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untruths. Mr. Cowart and I had a long discussion yesterday evening.

Q We have received your second amended answers to the interrogatories. I did note, at least in my copy, that it did not have a verification of that answer.

I would like to ask you do you verify that the answers that you gave in your second interrogatories, answers to interrogatories, were, in fact -- I can show it to you and it would possibly be a good idea to show you a copy so you know what you are responding to.

It's entitled subsequent answers to Defendants' first interrogatories. I will hand that to you, Dr. Shockley.

MR. BAILEY: I take back my promise about what I said. I have added two things together, the first installment you sent us and the second installment.

MR. ADAMSON: There is not a verification with respect to the truth and accuracy of that particular document.

THE WITNESS: Did I do that on the first one?

MR. COWART: You did, and you verified

it by telephone with me.

MR. ADAMSON: I would like to do
this, and this is basically just making
sure that, to the best of your knowledge,
that is true and accurate as to all
particulars and that you verify that as
true.

THE WITNESS: Yes, I have no questions about that.

(Whereupon, the court reporter marked Defendants' Exhibit No. 365 for identification.)

MR. ADAMSON: That has been identified as Defendants' Exhibit 365.

I have one other housekeeping matter before we get into the questions and that is to very briefly discuss a schedule for the taking of this deposition.

Our notice provides for it to begin at 10:00 o'clock and continue from day to day until completed. That is fully Mr. Bailey's and my intention.

Do you have any special requests with respect to a lunch break or with respect to concluding at the end of the day?

MR. COWART: As far as I'm concerned, we can proceed straight through.

MR. ADAMSON: Mr. Bailey and I would like to have a short break for lunch. Why don't we go, in this first session, until about, say, 12:30 and then take a 45-minute to an hour break and resume at 2:00 and then go until, say, 6:00 o'clock, if need be, and then resume tomorrow, if need be, at the same time.

MR. COWART: You don't really know how far you will go?

MR. ADAMSON: No. It's obviously difficult to tell now. We do have a great deal of material to cover.

There are a lot of things to talk about.

Mr. Shockley has lived a full life.

THE WITNESS: I trust not all aspects of my life are going to be discussed.

MR. ADAMSON: Not necessarily, but we certainly take the position that it's all relevant with respect to an action for libel and defamation.

THE WITNESS: We will discuss all things that are relevant. All of my life is

not relevant.

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MR. ADAMSON: You and I may quibble on that, Dr. Shockley, but we best not quibble in general terms and leave that to a specific question as it may or may not arise. I think we should start with some of your background first.

Q (By Mr. Adamson) Could you state your full name?

A My name is William Bradford Shockley.

Q Your date of birth?

A February 13th, 1910.

Q You were born where?

A In London, England.

Q Were your parents English?

A No.

Q What were they?

A American.

Q Why were they there?

A My father was a mining engineer. This was in connection with his business.

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Q What was his business?

A A mining engineer.

Q For whom did he work?

A I don't know.

1	Q Was your mother employed?
2	A I don't think so.
3	Q At what stage did you return to the
4	United States?
5	A In 1913.
6	Q Where did you move to?
7	A Palo Alto, California.
8	Q Did you live in Palo Alto for the
9	duration until what period?
10	A Approximately 1922.
11	Q In 1922, where did you live?
12	A I traveled with my family for a year or
13	year and a half or two years and then we settled in
14	Los Angeles, first in an apartment and then later in
15	a house in Hollywood. We later bought a house in
16	Hollywood and lived there. That is where I lived
17	when I went to Hollywood High School and to UCSB,
18	which was then the name of the University of
19	California at Los Angeles.
20	Q What year did you graduate from
21	Hollywood High School?
22	A I think it was 1927.
23	Q I read that you tested when you were a
24	teenager for a particular acientific experiment; is
25	that correct?

1	A When I was a teenager, I tested for a
2	particular scientific experiment?
3	Q Yes.
4	A I don't recall what that would refer
5	to.
6	Q Is there any time prior to entering
7	college, that you are aware of, that you took an IQ
8	test?
9	A I am aware of that and I do remember
10	something about the circumstances of the test. That
11	test, I think, was before I became a teenager.
12	Q That leads me to rephrase the question.
13	Prior to becoming a teenager, did you test for a
14	particular scientific experiment?
15	A Yes. I was tested by Louis M. Terman in
16	respect to his program for selecting the one or two
17	thousand particularly gifted children in the high
18	school in the school system in California.
19	Q What was the purpose of this experiment.
20	as you understand it?
21	A Professor Terman's experiment?
22	Q Yes, sir.
23	A His purpose was to learn of the
24	subsequent successive life and development of
25	children who were exceptionally gifted at these early

ages. 1 Were you selected for this experiment? Q 2 No, I was not selected for it. A 3 Do you know why? Q My score on the IQ test was not high 5 enough to qualify. 6 Do you recall what your score was? 7 I'm not sure that I'm accurate on this. 8 I think it was somewhere in the 120's. You then graduated from Hollywood High 0 10 School in when? 11 I believe it was in 1927. I could work 12 back from this because -- five years, one year in 13 UCLA or UCSB, and I graduated from Cal Tech in 1932, 14 so I believe it works back to 1927. 15 That is okay. We may get to it later. Q 16 In 1932, you graduated from Cal Tech with what 17 degree? 18 I think it was a BSC, Bachelor of 19 Science. 20 You principally have majored in 21 22 science-related courses? Yes, physics major. 23 A Did you take any courses in biology? 24 Q 25 I believe I did take a course in A

biology. I remember we did some operations on frogs 1 in a laboratory. Did you take any courses that might be Q 3 labeled under the general study of genetics? I think there may have been some mention 5 of this, but I don't think -- I am quite sure I 6 didn't take a course in which the word genetics appeared in the title of the course. 8 While you were in college, did you have 9 0 any other activities other than the study of physics, 10 any extracurricular activities? 11 I think I was a member of the fencing 12 team. If you research my history on this 13 sufficiently, you will also find, at that period, that I was engaged with some other students in some 15 things that might be called pranks. 16 What does that refer to, Dr. Shockley? 17 Let's see, what did we do? We 18 participated in inventing a fictitious student at one 19 20 time. Did you graduate that student? 21 Q I think the professor discovered this 22 A

before that. It was only in one course.

Q Was there any discipline imposed for the pursuit of this prank?

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A No.

Q Did you engage in any other activities?

Did you belong to any political clubs, any debate
societies?

A No political clubs, no debate societies, no fraternities.

Q Did you write any newspaper articles?

A No.

Q Did you participate in any broadcasts?

A I don't remember any.

Q Were you written up in any newspaper articles?

A I was written up in one article not particularly associated with Cal Tech. I was written up by the man who was the athletic director of the Los Angeles Athletic Club and I posed for pictures in a set of exercises which he ran as a pamphlet that was published in the paper. That is the only thing I recall.

One other thing, I did engage in some amateur magic and put on a few shows, not any extensive activities, you know, for boys groups on some social occasions.

Q After your graduation from Cal Tech, what was your next institution?

1 A MIT. 2 Q You went directly from Cal Tech, from 3 graduation from Cal Tech, to MIT or was there any time lapse? 5 There was no time lapse. At the closing 6 of the spring semester until the starting of the fall 7 classes at MIT, there were no other activities, that 8 I recall. 9 How long were you at MIT? Q 10 Four years. A 11 You graduated at the end of that four 12 years with what degree? You received what degree? 13 A It was a BSC, I think. 14 From MIT? 0 15 I'm sorry, MIT? It was called a PhD. A 16 Had it been engineering, it would probably have been 17 called -- might have been called a Science Doctorate, 18 SCD, but mine was in physics. 19 Q You received your PhD. in physics? 20 Yes. 21 Do you recall the name of your 22 dissertation? 23

A I recall the subject, but I don't recall the exact title. It may have been entitled -- well, no, I don't recall the title.

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1	Q	What was the subject?
2	A	The subject was the calculation of waive
3	functions in	sodium chloride crystals.
4	Q	Did you take any courses in biology
5	while at grad	iuate school at MIT?
6	A	No.
7	Q	Any courses that might be related to the
8	field or stu	dy of genetics?
9	A	Not that I recall.
10	Q	After you graduated from MIT first of
11	all, what ye	ar was that?
12	A	1936.
13	Q	What was your next activity after that?
14	A	My next activity that year was to teach
15	the undergra	duate physics course during the summer
16	quarter. Th	at was the experience I wanted to have.
17	I had, at th	at time, signed an employment agreement
18	with Bell Te	lephone Laboratories, but I wanted to
19	have the exp	erience of teaching a course at what was
20	then MIT's m	ain lecture hall. You did, in fact, do that?
21	Q	
22	A	Yes. You concluded that at what time?
23	Q	Oh, I don't remember. It was whenever
24	Α .	ession would have ended.
25	the summer s	ERRION HOUSE

Q Did you immediately go to Bell Laboratories?

A As I recall, yes.

Q That would have been the fall of 1936?

A Yes.

Q Where was your employment at Bell Laboratories?

A I was assigned to a supervisor whose name was Clinton J. Davidson and his office was located at 463 West Street, a building on the Hudson River, but I was initially assigned for an indoctrination period to another department that was located on Barracks Street and another one located across the street from the West Street Building.

I then returned to 463 West Street and worked in Davidson's group.

Q What period of time are we talking about while you were making this move?

A Approximately a year.

Q From the fall of 1936 to sometime the next year, you made two or three moves within the Bell Laboratories, but different --

A Yes.

Q -- different assignments?

A Yes, two particular locations.

In the fall of 1937, what was that Q development? Well, that development involved working in Davidson's group and my background being in solid state physics, which was an advancing new field in theoretical physics at the time. I became involved with a man in a different department, a Foster C. Nix, N-i-x, who had an interest in a phenomenon in metallurgical order and disorder. He interested me in this and I became sufficiently interested too, as I recall -- well, I did some research, wrote one paper on that and, in collaboration with Nix, wrote a review article in the whole field. It was a fairly extensive operation. Q

Was that the first article you had co-authored, the one that you published with Mr. Nix?

The first technical article that I No. A wrote, I wrote while I was preparing for a doctorate at MIT and that was called, as I remember, Electron Microscope For Filaments.

That was while you were a graduate Q student at MIT?

> A Yes.

Where was that published? Q

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1	A	Where was it published?
2	Q	Yes.
3	A	I don't remember the name of the
4	journal, but	it was probably something that would be
5	it was pu	blished in the Physical Review.
6	Q	Physical Review?
7	A	Yes. That's a main publication for
8	physics rese	arch.
9.	Q	You and Dr. Nix published an article in
10	what year?	
11	A	1937 or '38.
12	Q	If you could, I would like for us to
13	describe you	ur work. I'm trying to understand your
14	professions	l activities over a period of time.
15		What was the next step in your
16	professiona	l development?
17	٨	Well, where would you like me to go?
18	Q	I think we were up to the publication of
19	this articl	e.
20	A	Which one?
21	Q	The one with Dr. Nix.
22	٨	That was a review article. We also
23	collaborate	ed in wroting an article on the subject of
24	self diffus	sion in copper. This involved
25	collaborat	ion with Columbia University, a man called

Stedman who was involved in that. That may have been one of the first publications and that was showing how crystals change.

Q That was published in what year?

A I don't remember. It was 1937-1938, that time period.

Q You were still at that same location at Bell?

A Yes.

Q Besides publishing and doing this kind of research for these kinds of publications, how would you describe the nature of your work for Bell during this period?

A Well, it was the application of physical science and physical methodology to a variety of other problems. One that I omitted is while working at the location across from West Street, I did write another paper with John Pierce called the Theory of Noise and Electron Multiplier.

I wrote another paper, I believe, on a phenomenon involving electron streams.

Q Did you have a job title?

A Yes, the title was a member of the technical staff.

Q How long did you have that title?

1 anti-submarine warfare -- anti-operations research group. 2 You were director? 0 3 Research director of that group, which 4 5 is essentially the local head of the group. 6 Q How many people --7 I wouldn't be positive that was the 8 exact title. It may have been some other title, but 9 I was the leader of the group in Washington. 10 professor from MIT was the man who represented the 11 non-military agency, which I think was the National 12 Research Council, Professor Philip M. Morris, whom I had known at MIT and who recruited me for this job. 13 14 How long did you work for the Navy as a 15 research director for the anti-submarine warfare 16 group? 17 A I believe it was until the end of 1943. 18 0 Then what did you do? 19 Then I became an expert consultant in A 20 the office of the Secretary of War. 21 What was the nature of your duties 0 22 there? 23 I worked in the office of a man who was 24 called expert consultant to the Secretary of War,

expert consultant in the office of the Secretary of

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Edward L. Bowles, B-o-w-l-e-s, I believe. 1 was an eminent MIT electrical engineering professor 2 who had established that position, so he was one of 3 the primary technical advisors to Secretary of War 4 I worked in Bowles' office and my chief 5 concern focused upon the use of radar by the B-29's. 6 Q Where was your office? 7 Sir? 8 Where physically was your office? 9 It was in the Pentagon with Bowles. A 10 Otherwise, it was in one of the buildings on 11 Constitution Avenue. 12 Prior to moving to Bowles' office, it Q 13 was in a building on Constitution Avenue, and then it 14 was in the Pentagon when you moved to Bowles' 15 office? 16 Say that again? A 17 Prior to moving to Bowles' office, you 18 Q were in a building on Constitution Avenue? 19 Yes. A 20 Bowles' office was in the Pentagon? 21 Q 22 Yes. 23 How long did you stay there? Q 24 Well, I did some traveling, but aside 25 from that, I stayed there until the atom bombs

exploded. The war was then clearly at an end.

Q That would have been in 1945?

A Yes. I think probably, after that time, I spent less than a week back in that office, whatever time it took to clean up the papers and so on.

Q Did you then go right directly back to Bell?

A Yes, I went directly back to Bell.

Q That would have been in late 1945?

A Yes.

Q You returned to Bell. Then you said you did some traveling; what was the nature of your traveling?

A Well, I traveled inside the United States to one of the B-29 training bases which was located in Salina, Kansas.

Q This was work-related travel?

A Work-related travel, work related to the project of improving utilization of radar by the B-29's. Later, in 1943, I traveled to India and stayed for one or two months in Karagpur, India, where the headquarters of the B-29's was located, and where General Arnold was running the B-29 operations.

1	Q You were in India a little over a
2	month?
3	A It was more like two months.
4	Q The name of the town was what?
5	A Karagpur, K-a-r-a-g-p-u-r.
6	Q That is in what part of India?
7	A About 100 miles or so west of Calcutta.
8	Q What precisely did you do? What was
9	your assignment in India?
10	A The same as I said before, to contribute
11	to the effectiveness of radar utilization,
12	particularly radar bombing by the B-29's.
13	Q What was your position when you returned
14	to Bell in 1946?
15	A 1945.
16	Q I'm sorry, 1945, late 1945?
17	A I was co-director of a group which was
18	called, I think, research in solid state physics.
19	Q Where were you at that point?
20	A At that point, we were located at the
21	Bell Laboratories in Murray Hill, New Jersey.
22	Q Go back in time a bit from the period
2 3	you were at MIT as a graduate student; were you a
24	member, while you were at MIT during that time, of
25	any organizations, associations, clubs, political

groups?

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A No, I don't think so. My activities were very, very closely related to the problems that we talked about, problems of getting a PhD.

Q So you do not recall anything of that nature that you may have been a member of?

A I have a vague recollection of something which later on came up as being a dubious thing and I cannot quite remember what it was. It was something which would appear -- might have appeared to have had some kind of a Communist tie-in and I maybe even signed some papers, some of these worthy sounding papers having to do with welfare for the world somehow which might have been a Communist cover thing.

I'm pretty well convinced this is a pretty insignificant thing because of the security clearances that later occurred.

Q During this period of time, obviously great world events were taking place. Did you have any particular political philosophy or views that you might could describe?

A Oh, my views went through rather juvenile aspects during this period. While I was at Cal Tech, I remember being greatly attracted to

something called technocracy, which is the idea that technology and so on would save the world.

I was at one time assigned an advisor in some special course work I did at Cal Tech who was obviously a Communist inclined fellow. I was not particularly impressed with his philosophy, I remember that.

Q Then, did you --

that the good intentions would suffice to solve many problems and the technological type of approach might be extremely productive, useful. I remember this looking back at some of these things. I don't remember them clearly now, but looking back at some of them and remembering now, they seem, in retrospect, to be rather naive things. I was certainly not active in any organizational way.

Q So, throughout the period of the 30's, the period we are talking about, you recall nothing that you --

A I didn't pay much attention to this.

Q What about in the 40's, from the time, say, 1940 through the time you returned to Bell Laboratories in late 1945?

A In 1940, I think I was probably working

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on designing radar equipment to go into U.S. submarines at Bell Laboratories and then, having gotten into the military business, that was a thoroughly occupying job so my devotion there was towards very specific aims related to winning the WAT.

All of the work that you did during this 0 period in the wartime, from the time you left Bell after the outbreak of the war until the time you joined the Navy, and then your expert consultant experience to the Secretary of War's office, did you -- all of the work that you did was related to this anti-submarine design work, related to physics and the like?

Well, no, that's not exactly the right way to put it. The words operations research should be defined in this connection, how it originates. Should I do that?

I would appreciate it.

Operations research was an important discovery made in the running of wars. It was made in Britain and it must have occurred quite early on.

I think I can best describe it and convey quickly what it was about by one of the classic examples of operations research which was carried out by, I believe the initials are, P.M.S.

Blanckett, B-1-a-n-c-k-e-t-t, a physicist who

sometime after the war won the Nobel Prize as being
the first person that produced transmutation of
elements by bombardment of -- I don't know what kind
of particles he used.

Anyway, Blanckett may have had a Naval background. At any rate, he was associated intimately with a portion of the British Air Force which was most engaged in fighting submarines. This was called Coastal Command.

With the Coastal Command, he carried out an operation which probably increased -- I'm sorry, carried out a study which was put into effect and very easily put into effect and probably increased the effectiveness of the Coastal Command attacks on submarines something like 10 fold.

The classic example of the things which make operations research -- by the way, the word operations enters operations research because it's research done which is particularly relevant to that branch of a military establishment which is called operations. These are the people that actually give the orders to go out and shoot the guns, move the troops.

It's also called the Third Division.

Generally there are four divisions: the first one is

-- what is it? The first is simply personnel and the
second is intelligence and the third is operations
and the fourth is logistics.

You have G-1, G-2, G-3 and G-4 and this is G-3. It gets the name operations research because it's done in connection with the research that is done on operations.

In this case, the situation had arisen that they had done some studies of what is the state of affairs when a Coastal Command aircraft attacks a submarine.

First of all, it must have seen the submarine on the surface. It attacked the submarine. If the submarine sees the aircraft soon enough - it may never see it - it can submerge and never find it.

What they found was if you took the median time that the submarine had been down, when the aircraft got to the place to drop the depth charges, the submarine would be about 60 feet deep. This may not be the exact number, so what they said is we had better aim at the middle of the situation so we set the depth charges at 60 feet.

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Blanckett examined the actual data. He found information there that nobody could have predicted ahead of time, which was something like 10 or 20 percent of the submarines were still either on the surface or the swirl they left diving was extremely evident.

- Q I would like you to, if you could, to relate it to precisely what you were doing.
 - A Operations research?
 - Q Right.
- A I'm about halfway through this. If I may, I would like to complete this. I know no way of conveying what operations research was in compact words anywhere near as effectively as by giving you an illustration.
- I appreciate the illustration, but keep in mind that we have got a lot of material to cover, but please fully explain everything as precisely as you want to.
- A I will finish this one. I wanted to make the point on this that one could not have predicted by anything one knows about human eyesight or by some estimates in what the alertness of lookouts in airplanes or submarines will be, you know, what fraction of the submarines would actually

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be that close to the surface when the airplane attacked.

This was a very substantial fraction. somewhere around 10 to 20 percent.

Those submarines would not be particularly damaged by a 60-foot setting of the depth charge. Blanckett said to change it to 25 feet.

They then began to sink more submarines and the German Command was very much disturbed by the power of these weapons. That was the objective of operations research, to try to find situations in which, by analysis of data, one could make definite predictions as to how to increase the operation's effectiveness.

We looked for things of that sort in the Navy. We suggested certain tactics for airplanes searching for submarines which we think probably increased the effectiveness of the Naval operations.

I also did some operations research in India, but this simply confirmed that LeMay was a remarkably effective general. It gave him data which he was very glad to have presented and which later got into print when I was one of two people that were assigned the job of trying to write a paper for

General Arnold to put in a book that was published shortly after the war.

I'll take 10 seconds to say what LeMay did. He said, "It's not how many bombs" -- when he was in England. he said, "It's not how many bombs you carry across the Channel that dropped, but how many you get on target."

what he did is sacrificed 10 or 20 percent of the total flying time of his outfit in training to make sure the handling of dropping bombs would be superlative. The number of bombs on target that resulted after LeMay took control of those B-29's went up by about -- not as much as 10 fold, but at least 5 fold.

Q Okay.

A Operations research is also defined as scientists at the operational level. You see, there were other things that were quite important in settling such matters as what is the best way to use the bombers in a bombing attack; send them all at once or one at a time, spread them out?

Q Is it fair to say that none of the research or scientific work that you did during this time involved biology or genetics?

A Specifically, no, I would say it did

not. 1 Now, we left your parents in Los Angeles Q 2 and I would like to just establish this: 3 they are deceased presently? 4 My mother died in 1977 and my Yes. 5 father died sometime around 1929. 6 Your father died while you were still 7 Q 8 in Los Angeles, still in high school. 9 A Your mother continued to live in the Los 10 Q Angeles area until she died in 1977? 11 She lived for a time, I think, in 12 New York City and then moved to Palo Alto. I don't 13 remember the date she moved there. 14 What was your father's age when he 15 16 died? 17 Sixty-nine. A Your mother's age? 18 0 Ninety-eight, I think. 19 20 During that period of time in the 30's Q when you were going through graduate school, Cal 21 Tech. graduate school, MIT, did you maintain any 22 23 frequency of contact with your mother? 24 Not a very high frequency, no. She was

distressed that she didn't get more letters.

Most mothers are. What about during the Q 1 time you were at Bell Laboratories before joining the Navy Department; did you have some frequency then? 3 What do I say? When I was at Bell 4 Laboratories before the joining the Navy Department? 5 6 Q Yes, sir. 7 Well, I don't recall much in the way of 8 details there. I know at one time my wife and I took 9 a trip to -- no, that was afterwards. After I 10 returned after the war, my mother came and took care 11 of our children while my wife and I were away. 12 The next question is when did you get Q 13 married, Dr. Shockley? 14 Well, I was first married in 1933 and 15 divorced in -- yes, divorced in 1954 and remarried in 16 1954. 17 How many children did you have by your 18 first marriage? 19 A Three. 20 Do you recall the years they were born? Q 21 Oh, 1934 for the first child, who was a A 22 daughter. 23 What was her name? Q 24 Alison, A-1-i-s-o-n. The second one is

William Alden Shockley and he was born, I believe,

in 1962. The youngest, Richard Roaditt Distaley, was born in 1967.

All of the time that you were at #17 and at Bell and working for the Newy Department, assuming they were born, your family was with you. I take it?

A Yes. When I worked in the Navy
Department, my family stayed in Madison, New Jersey,
which was my residence. I commuted from Washington
to Madison.

On what kind of besie?

A Not quite as often as once a week. I don't believe.

Where did you live when you were in Washington?

A Quite a lot of the time was in the Hay Adams Hotel. Another hotel we stayed at quite a lot was -- I think they may now call it the Lee Sheraton. There's been a whole series of changes of names of that hotel, but Robert E. Lee's name is always in it somehow, I think.

Q That was in downtown Washington?

A Yes.

Q Let's go back to the period when you returned to Bell in 1945. You, I think, stated your title at that time: what was it that you began doing

in 1942. The youngest, Richard Konditt Sheekley, was

Q All of the time that you were at MIT and at Bell and working for the Navy Department, assuming they were born, your family was with you, I take it?

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Department, my family stayed in Madison, New Jersey,
which was my residence. I commuted from Washington
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- () That was in downtown Washington?
- A Yes,

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() Let's po back to the period when you fernined to hell in 1965. You, I think, stated your little at that you becau doing

for Bell?

A When I came back in 1945?

Q Yes, sir.

A Well, the title I think was co-director of the solid state physics research group. I think I was still called a member of the technical staff.

Q What did you begin to do at that time? What was the nature of your work?

A Well, one of the things we started trying to do rather early was to make a semiconductor amplifying device, a precursor to getting into the transistor. I was also involved in other things having to do with the solid state physics area dealing with ferro-electricity. I did some work which I was very pleased with along with some people in the magnetics group on the structure of magnetic domains and magnetic crystals, various kinds of iron alloys.

Q I have read in various biographies of you that you have a number of patents that you obtained or things you invented while you were at Bell?

A Yes.

Q Could you relate perhaps some of those or tell us something about those, please, the

registration of those patents along with the time frame and give us some idea when this all came along?

they had at Bell Laboratories was one I did in this indoctrination period in the vacuum tube department which was called an electron multiplier. These are used for picking up very faint light and amplifying it. The light falls on the plate in the electron multiplier and it is then drawn by electronic field and impinges on the second plate with sufficient velocity to knock out electrons and, in turn, draws on a third plate and knocks those out so you get a cascade of multiplication.

Q That was in the first period you were at Bell?

- A In the indoctrination period.
- Q In the late 30's, say?
- A Probably '37 or early 1938. I don't remember just how long that period lasted.
- Q What was the arrangement then, and it may be the same now, with respect to your work at Bell and any interest you may have had in those patents?
 - A Very, very simple. When you joined

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Bell Laboratories back then, and I presume the same is true now, if you signed an agreement, they give you one dollar and everything you invent belongs to There is no waiver in this, but the management at Bell Labs is a very enlightened one and if you should happen to invent something which would make great improvement in the manufacture of a diaper, crib, something of this sort, I think they would certainly release that to you.

That's the way it was when I was there, but that may have changed somewhat.

Did that ever occur to you while you Q were employed at Bell?

> Of inventing something different? A

Yes. Q

As a matter of fact, I did invent something different which they treated in that way.

> What was that? Q

Oh, this was an optical device which enables the instrument that contains it to compare what it sees in the outside surroundings through a lens with a photograph of maybe the same thing and it's able then to be directed to adjust itself until the tumors are properly matched.

It made use of a mathematical theorem

which says something that is maximized when two pictures match, you get a condition which would lead to a maximum electrical signal and the idea of this is to use it as a device for a homing bomb, but we also might have other industrial applications. I thought it might have important applications and requested to be able to sell it outside and this was granted.

The Laboratory got a non-exclusive license, but nothing came of it.

Q Did Bell have a practice of giving bonuses or the like for --

A No. I have written on this subject, actually, or on this question. I'm opposed to specific bonuses for a place like Bell Laboratories. bonuses for making inventions. I am inclined to give a bonus of, say, triple time for the stress and discomfort a scientist may have in going through the patent applications where he has to be dealing entirely with legal people during that time and looking at the way the specifications are written.

I acquired a great deal of respect for the skill of specification writers as a result of my experience in this business, but the point on this is the problem with bonuses, specific bonuses, is that

this means if you have a bright idea at a conference. you may want to hold that idea to yourself so you can make sure you have adequate records of priority on it so as to be in a favored position, whereas if your rewards are based more on the judgment of an experienced leader who has been through the same experience you have, these judgments will be more fair or something of that sort because it will take into account, in the case of some people -- some people may never file patents, but they may produce a stimulus among others which is obviously leading to the creation of a number of inventions.

I remember getting into some exchange in a proceedings of the Electrical Engineers Institution while taking that position I just described now. I think it would have made the place a less agreeable place to work.

Q Again, tracing the period that you first joined Bell to the time that you left the War Department and returned --

A First joined Bell to the time I left the War Department, okay. You're talking about my first continuous period at Bell Labs?

Q Correct, including the time you were in the military -- not in the military, but employed by

the military as a civilian employee: were you a member of any associations, scientific associations? Oh, yes. Cultural associations, organizations? 0 Let's take them by categories and let's take scientific ones first. The American Physical Society for a very A long time and now. You are still a member of that? Q Yes. A You joined that when? 0 I don't remember. It may have been as a A student, as an undergraduate. That was a continuous thing? 0 A Yes. Any cultural organizations? Q I don't think so. A Q Any social organizations? No. Or political? Q Well, I can't remember when I became a 22 member first of the Republican Party. 23 Do you recall when you cast your first Q 24 Were you a registered Republican at that vote? 25 time?

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A I don't remember. I think I cast my first vote very shortly after being 21 years old.

Q Okay.

A There was some considerations there of making sure that the U.S. citizenship was established, you know, foreign birth. I remember my mother taking an interest in this. I was not very interested, but I think she would have insisted on my doing whatever was appropriate at that time.

Q Did you do anything to get yourself declared a U.S. citizen?

A Well, there was something I did and whether it was simply registering or not, I don't remember. There was something else I did. I think I am still a British citizen.

Q By virtue of your British birth, you are a dual citizen?

A Yes, dual citizenship.

Q From the period --

A You said social organizations? I could have mentioned the Appalachian Mountain Club. Would that be something you would take in?

Q Yes, that would be an organization that would fit that.

A The Palo Alto Yacht Club later on and

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various other clubs.

The Palo Alto Yacht Club later on? Q

When I was in Palo Alto after leaving Bell Laboratories.

We are going to get to that. We are Q still, I think, in late 1945 where you went back as co-director at Bell. We were talking somewhat about the patents and your history of trying to tie some registration of patents to particular time periods.

How many patents to date are you associated with with Bell? I say associated and you may need to help me here because -- are they registered in your name and Bell's or what, as far as your being the inventor?

I'm the co-inventor. I do not remember what my last patent number was at Bell Labs. could easily be ascertained.

I'm not sure I made any attempt to fix it in my mind. I'm not sure if it's on the order of 60 or on the order of 80.

- Could you guess? Q
- It's in that range. A
- Sixty to 80 patents? Q

I'm quite sure I did not hit 100 patents at Bell Labs. That is sort of a par for the course

kind of thing.

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Q One hundred is like being an ace in World War I?

A Something like that. I had other patents for Beckman and I have not run a count on these. I had one which I did while doing some consulting for Cal Tech.

Q While you were an undergraduate student?

A No. after that, when I was making a transition from Bell Labs to the outside.

Q Let's try to get the time line scoped out here. You were at Bell Labs from 1945 to when?

A Well, let's see. I came back to Bell Labs in 1945. I was there until 1954.

Q 1945 to 1954?

A Yes.

Q All in New Jersey?

A Yes, all in New Jersey. There was a period from about mid-1954 to about September, 1955, when I was at Cal Tech for about half a school year and then in the Pentagon again for a year.

Q Now, you said from mid-1954 to 1955?

A I wrote it down on the table here because I have been around to a number of places

and I don't remember these dates too clearly and I can maybe fit one in by refreshing my recollection on another one. I have written about five dates down here.

One I wrote down is '45 to '54. I will give you these numbers and we can fill it in later.

Q That's fine.

A There is then 1954-55 or maybe that is -- maybe we should split that into two. We'll say 1954 to, say -- 1954, June, and I'm not sure that date is right --

Q There is certainly one momentous event in your life and that was the award of the Nobel Peace Prize. When was that?

A That was 1956. I have no trouble remembering that.

O What month is the Nobel awarded?

A On the 10th of December which is called the -- that's the anniversary of the date of Nobel Scott, so we have 1954, June, to 1955, June.

Q I'm not quite sure where you are. I apologize.

A Let me give you a series of these. I have now written down 1954, January, to 1954, June. Then I have 1954, June to 1955, June.

Q Where were you then? 1 Let me do the whole list of them first. A 2 3 Q Fine. Then I have written down 1955 to 1963. 4 5 Then there is 1963 to 1975. 6 There is another period there that 7 overlaps, 1965 to 1975. Why that is overlapping is because '63 to '75 was the period that I was a 8 9 professor at Stanford. '65 to '75 was the period 10 when I was -- what was I called? It was an executive 11 consultant, I think was the title, at Bell Labs. 12 Neither of these positions was full 13 Now, I'll go back to January, 1954, to June, 14 1954, visiting professor at Cal Tech. 15 June, 1954, to June, 1955, research 16 director of the weapons systems evaluation group. 17 Also, 1955 to 1963, I had an association with various 18 business activities in California. There may be at 19 least three companies involved in that. In 1963 to 1975 and '65-'75, those are 20 21 Bell Labs. 22 Q 1975 to date? 23 Retired. 24 I take it in the period you were at Cal 0

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Tech, that was also the period in which you were

undergoing your divorce and remarriage? A That's right. January, 1954, to June, 1954? Q A Well --That doesn't necessarily follow, Q 5 You could have been in the weapons system actually. 6 evaluation group? 7 That's right. I think the divorce A 8 occurred during the period of the weapons system 9 evaluation group. 10 I assume a remarriage as well? Q 11 The remarriage occurred later in Α No. 12 1955. 13 That was in 1955? Q 14 That was in 1955, beyond June. Yes. 15 '55 to June and after June, but I'm not sure I split 16 June is the right date. 17 What was the date of your remarriage? Q 18 Thanksgiving of 1955. I recall that 19 that's the 23rd day. That's reasonably well fixed in 20 my mind because it's the number which I use in 21 drawing checks, drawing money from one of these 22 electronic tellers. 23 You're talking about the code number 24 Q that you feed in in order to trigger your --25

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A Yes. 1 MR. BAILEY: We promise not to tell. 2 It has more numbers. THE WITNESS: 3 MR. ADAMSON: Let's take a five-minute 4 break. 5 (Whereupon, a recess was taken.) 6 (By Mr. Adamson) Let's continue, Dr. 7 Q We have established, I think, the dates 8 Shockley. going back to the time you were a visiting professor 9 at Cal Tech. As I understand it, that was from 10 January, 1954, through June, 1954, so that would have 11 been approximately one semester or a quarter or 12 whatever? 13 One semester is -- well, I think it was 14 two quarters. 15 What did you teach when you were a 16 Q visiting professor at Cal? 17 Solid state physics, the general 18 Α introduction to application of quantum through solid 19 state physics. 20 Were you teaching in the graduate Q program? Yes. A Exclusively in the graduate program? Q As I remember, yes. A

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Q I	oid you teach or have anything to do
with biology (or genetics?
A 1	No.
Q 1	Did you study anything during that
period to do	with biology or genetics?
A 1	No.
Q	Then you became a research director of
the weapons s	ystem evaluation group?
A	That's right.
Q	Where was that?
A	That was located in the Pentagon.
Q	You moved back to Washington from
California, a	pparently?
A	That's right.
Q	This would have been about the time that
you were gett	ing a divorce. Did your first wife move
to Washington	with you or had the divorce already
occurred?	
A	I think the divorce had not occurred.
She did not m	ove to Washington.
Q	She did not move to Washington?
A	No.
Q	What about your children? At that time.
you had three	children?
A	I'm trying to remember the date of

п	
1	marriage of my daughter. I have forgotten whether 1
2	went to her wedding from Washington or from somewhere
3	else.
4	Q Where was she married, Dr. Shockley?
5	A She was married in Madison, New Jersey.
6	I had some visits with the children during that
7	period of time.
8	Q During that period, you were
9	A I was in Washington.
10	Q So she actually did not live with you in
11	Washington?
12	A No.
13	Q They continued to live or reside with
14	your first wife in California?
15	A In New Jersey.
16	Q Excuse me. in New Jersey. Did your
17	first wife ever move to California when you were the
18	visiting professor at Cal Tech?
19	A No, no.
20	Q Your family stayed in New Jersey during
21	that period?
22	A Yes. My daughter, at that time, may
23	have been at Radcliffe so she was living in the
24	Cambridge area.
25	Q Were your two sons living in New Jersey

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1	or were they in college, at that time?	
2	A I don't remember about the older boy.	
3	He was at Lehigh University in Pennsylvania for a	
4	time and just what the overlap is there, I don't	
5	know.	
6	Q Your other son?	
7	A He would have been in New Jersey, yes.	
8	Q Your daughter, Alison, went to	
9	Radcliffe?	
10	A Yes.	
11	Q She graduated from Radcliffe?	
12	A Yes.	
13	Q Do you remember the year?	
14	A No.	
1	Q Approximate year?	
1	A Well, it would have been approximately	
1	1955.	
	Q She married about that same time?	
	A I think that's right, shortly after	
	20 that.	
	Q You did attend her wedding?	
	22 A Yes.	
	Q Did you attend her graduation?	
	A No, I don't think I did.	
	Q Is your first wife still living?	

1	A No.
2	Q When did she pass away, Dr. Shockley?
3	A Oh, in about 1978, I think.
4	Q Did she maintain custody of the three
5	children under the terms of the divorce?
6	A No. In 1965 or 1963, one, the custody
7	of the youngest son was transferred to me.
8	Q And what were the circumstances
9	surrounding that?
10	A Well, he had run into some problems in
11	the area of delinquency and it was thought that this
12	would be better.
13	Q That custody
14	A No litigation in connection with this.
15	Q It was a mere filing? There were no
16	Court proceedings to show the transfer of custody?
17	A No.
18	Q It was just done?
19	A It seemed very simple somehow. I don't
20	remember what needed to be done, but the operation
21	didn't involve any complications.
22	Q What year was that?
2 3	A I believe that was in 1963.
24	Q Did he, in fact, move into your home at
25	that time?

Let's talk about the older son.

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younger son.

1	go to Lehigh?
2	A Yes. He dropped out from Lehigh,
3	however. He has had various problems.
4	There has been very limited contact
5	between the two of us.
6	Q Since he dropped out?
7	A Oh, maybe a year after that time. He
8	has been very much on his own.
9	Q Where is he now?
10	A I believe he is in Los Angeles.
11	Q Other than the contact approximately a
12	year after he dropped out, you have had no other real
13	contact with him?
14	A Very few contacts.
15	Q What kind of contact have you actually
16	had?
17	A I think maybe one or two letters from
18	his wife.
19	Q Have you met her?
20	A No, I have not.
21	Q What about with your daughter, Alison?
22	A When have I last seen her, you mean?
23	Q Have you had frequent or infrequent
24	contacts with her?
25	A Oh, I see her about half the times I go

go to Lehigh? Yes. He dropped out from Lehigh, 2 He has had various problems. 3 There has been very limited contact 4 between the two of us. 5 6 Since he dropped out? Oh, maybe a year after that time. 7 has been very much on his own. 8 9 Q Where is he now? 10 I believe he is in Los Angeles. 11 Q Other than the contact approximately a 12 year after he dropped out, you have had no other real 13 contact with him? 14 A Very few contacts. 15 What kind of contact have you actually Q 16 had? 17 I think maybe one or two letters from 18 his wife. 19 Q Have you met her? 20 No, I have not. A 21 What about with your daughter, Alison? Q 22 When have I last seen her, you mean? 23 Have you had frequent or infrequent Q 24 contacts with her? 25 Oh, I see her about half the times I go A

1	to Washington.		
2	Q	She's living in Washington?	
3	A	Yes.	
4	Q	Is she still married to the person she	
5	married afte	er graduation from Radcliffe?	
6	A	Yes.	
7	Q	Is she employed?	
8	A	No.	
9	Q	Does she have children?	
10	A	No.	
11	Q	Your youngest son, where is he living?	
12	A	San Diego.	
13	Q	What does he do there?	
14	A	He works in a Naval Research	
15	Laboratory.		
16	Q	What is his field?	
17	A	I know he works on non-linear	
18	electrodynam	ics which may be things having to do with	
19	lasers and f	usion. The words may be misclassified.	
20	Q	His field is physics as well?	
21	A	Yes, sir, or the engineering aspects of	
22	physics.		
23	Q	Do you have some contact with him?	
24	A	Yes.	
25	Q	Frequent or infrequent?	

Well, rather infrequent, but some rather A 1 He participated in some activities which I recently. 2 was involved in a matter of a month or so ago. 3 What was the nature of that? Q 4 Well, he collected signatures on a A 5 petition in San Diego. 6 What was that in connection with? Q 7 The petition was in lieu of a filing A 8 fee. 9 Q For? 10 My candidacy in the Republican Primary Α 11 for U.S. Senate. 12 He collected signatures in connection Q 13 with that candidacy? 14 Yes. A 15 He sent them to you? Q 16 He delivered them to the Clerk of the 17 Registrar of Voters in San Diego and, through error 18 on the part of that Clerk, I'm quite certain, they 19 refused because the Alameda County form had been used 20 rather than the San Diego County form. There were a 21 number of phone calls made in getting Alameda County 22 straightened out. 23 This may be a good time to ask, since 24

it's been introduced, what is the status of your

candidacy in the Republican Primary?

A As I understand it, my name should appear on the ballot.

Q Has that been served by the Secretary of State of California?

A I have not received a certification of this. I filed in the paper and it will be, I would guess, that I would get some formal notice.

Q Well, we'll talk about that later, I'm certain. June, 1954, to June, 1955, you were research director of the weapon systems evaluation group.

You identified that as being in Washington and that was about a year. What was the nature of your activity?

Well, I presided at conferences. The weapon systems evaluation group is a tri-service group located in the area of the Joint Chiefs of Staff, at that time, and it has representatives from all three services, the Army, the Navy and the Air Force.

It had junior staff members from the military, the junior staff members being generally in the range of Major-Lieutenant-Colonel and it did research on various -- estimating the effectiveness

of various weapon systems that were being proposed, trying to estimate what effects would have gone on if war had occurred for the use of these systems. 3 Was there any results of that year as 4 director of that group? 5 Well, a number of reports were filed. A 6 You left that group; was there a reason Q 7 you left? 8 I had agreed to take the job for Yes. 9 A one year and I had, at that time, reached the 10 conclusion that I wanted to try starting a business. 11 It was during that year, too, that you 12 0 remarried, I take it? 13 No, it was later on, not during that 14 year. It was after June. 15 When were you remarried? I apologize 16 because I know I have asked that before, but I have 17 forgotten your answer. 18 Thanksgiving Day, 1955. 19 A Shortly thereafter, you were remarried 20 as you were about to begin these business 21 enterprises, or a business enterprise? 22 After I established starting the support 23 setup to tie in with Beckman Instruments. 24 Let's first establish where did you meet 25 Q

your second wife? 1 2 I met her in Washington, D.C. When was 3 It was before I came to the weapon systems evaluation group. It was during 1954. 4 5 Q So, to be sure I understand, it was before you joined that group in 1954? 6 7 A Before I went to the Pentagon. 8 You were still at Cal Tech when you met Q 9 her? 10 A Yes. 11 Q You met her in Washington? 12 A That's right. 13 Q Was that the first time you had met? 14 Yes. 15 Q What were the circumstances that you 16 were in Washington? 17 I was invited to a dinner by a lady who 18 had been a fellow rock climber in the Appalachian 19 Mountain Club, you know, to meet her fiance and my 20 future wife was there. 21 You traveled from California to attend 22 this dinner? 23 No, I traveled from California for other 24 reasons. 25 What were the reasons? Q

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A I'm not sure that I remember it clearly.

I think it was -- let me think. I'm pretty sure -no, that wasn't the time.

I don't remember what the reason for that trip to Washington was.

Q The position was --

A I don't remember whether it had anything to do with the arrangements for coming to the Pentagon or not or whether there was --

Q Do you remember the time of year? Was it springtime?

A I don't remember that, no.

Q The position as director of the weapon systems evaluation group strikes me as being a somewhat prestigous position and it was not long after that that you were, in fact, awarded the Nobel Prize.

Had there been some publicity or attention within the community of your work on the transistor that obviously led to a much more notable award of the Nobel Prize?

A Well, I had received, in that time, I believe, two swards in connection with work that was related to the transistor.

One was a prize by the Electrical

Engineering Society, what is now the, and it may have been then, the IEEE, which stands for Institute of Electrical and Electronic Engineers.

Prior to that, it was two groups, Power Engineers and Radio Engineers and this particular prize was definitely for the transistor. Then I won another one which was more having to do with solid state physics.

Q From whom?

A From the IEEE again.

Q The same organization?

A Yes. Let me see, there was also another one from the National Academy of Sciences.

Q Can you date these in a particular order?

A No.

Q Approximately?

when the first one was. The Marsh-Leedman was the first one and the Comstock Prize was the National Academy of Sciences, which is a prize related to work done in electromagnetics. I think transistors was mentioned in the citation.

Q Let's talk about the invention of the transistor. I think it would be easier, rather than

my asking you specific questions, for you to just tell me about how the transistor, in general term, came to be invented and the time period we are talking about.

A In 1939, when I was in this period of indoctrination -- '39 sounds too late, but it was during that time. Having left the indoctrination period of Bell Labs, in some of the work I was doing with the Davidson Group, one of the members interested me in a semi-conductor device which is something like the things that occur in transistors, a copper oxide rectifier.

In thinking about how the copper oxide rectifier was supposed to work, I had an idea that one could make a structure based on the same principles which would be an amplifier, so to speak, a device which acts like a valve.

Q We are still talking about that early period, pre-war period?

A Yes. The date, as I recall, was 1939 that I wrote a notebook entry describing this sort of device, got it witnessed shortly afterwards.

Q Is that the one I have seen photographs on and some articles on?

A No. If you have seen articles of

mine -- you may have seen pictures of it, but if you have seen pictures in other articles, you would never have seen this first device.

Q That's a very vague question, I understand.

A This thing never worked in 1939. We tried to make it work. The war came in and after I came back, I again developed an interest in this.

The semi-conductor technology had advanced during the war.

I came to ideas rather like the ones I had in 1939 - although I didn't recognize it at the time - of ways in which one could use the new materials to try to make an amplifying device.

These did not work. The fact that they didn't work meant that there was something about the physics we didn't understand because they should have given observable effects. We didn't predict they would have been useful, necessarily, but they should have at least shown that this thing, in principle, was possible.

We then did research on what might be preventing these things from working. Two colleagues, Bardeen and Brattain, B-a-r-d-e-e-n and B-r-a-t-t-a-i-n, carried out this research and, in

the course of this, found out some new physics about the surfaces of the semi-conductors.

In the course of these experiments, a suggestion was made by a man called Gibney,

G-i-b-n-e-y, that Brattain would alter one of his experiments in a certain way. That experiment, which occurred in November of, I think, 1947, November 17th -- that's a very critical date that I did research upon looking at notebook entries because what had apparently prevented our earlier observation was a phenomenon on the surface of the semi-conductor that prevented electrical fields from entering inside and controlling the current flow.

This new experiment appeared to be reaching inside. Within a week, there were a large number of notebook entries.

Within a month, the first point contact transistor worked, which Bardeen and Brattain made.

Q Those are the two gentlemen that shared the prize with you?

A That's right. There had been actually another device which amplified and which is covered by one or more claims of my patent on the junction transistor which may have amplified -- it did, as a matter of fact, amplified earlier than that, but

had a very poor frequency response.

The point contact transistor had certain mysteries about it. It didn't have a sound physical theory. I endeavored to invent improvements and, a month later, invented the juncture transistor.

That was early 1948. We first fabricated a working junction transistor in 1950 and the first good one was in early 1951.

This first really good one made it quite evident to everyone that the point contact transistor was a dead issue and so I described both when the inventions occurred and when the first realization of the real potential occurred.

O Did you know what you had?

A We had little doubt that we were dealing with something that would be very important and we felt that as soon as we had first achieved the amplifying device and we didn't really ask ourselves, at that time, how far could this go and so on.

We focused on trying to improve and understand the physics thoroughly, but we had no doubt that this might be a very big thing. It may be also worthwhile to observe that Bell Telephone Laboratories had no doubt this was a very big thing because when we first held an exhibit for our boss

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and our boss' boss, the director of physical research at Bell Laboratories, Harvey Fleischer --

When was that, first of all?

A That was on Christmas Eve of 1947, the 23rd or 24th of December; immediately after that, tight security was placed over the situation. I think probably no more than 100 people in Bell Labs of the many thousands knew that this had been achieved until the patents had been filed, and first an announcement was made for the military and a week later an announcement for the press.

Q When was that?

A That was about July of 1948.

Q The patents were filed that early?

A They were filed earlier than that.

Q It was ready for announcement in July of 1948?

A That's right.

Q There was, I assume, a fair amount of publicity about the findings. Was there also personal publicity that you and the other two men --

A First of all, there was also, at the same time, a publication in the <u>Physical Review</u> of three letters, technical letters, describing the point contact transistor -- two describing the point

contact transistor and another letter by Gerald Pearson, now at Stanford, and myself on what was called the field factor which is exerting a field from outside the semi-conductor to all that happens inside. What about a more commercial kind of Q publication? Was there general publicity or what? One of the slides I showed is an This was how the New York Times dealt with electron. It was published in a little box section on this. radio news. It was the last item and it got three paragraphs following something about what Arthur Godfrey was doing. On the other hand Electronics Magazine. which is headed by much more technical people, realizedthis and so there was a big play there. This was all in 1948? Q Yes, all in 1948. How does one receive a Nobel Prize in Q the sense of who nominates the people for such? I think anyone can nominate, but all the Nobel -- I don't know. You don't know who nominates it? 0 No. A

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Did Bell Laboratories, as a matter of

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fact, nominate the scientists for this most notable achievement?

A I don't know what went on there, but I am sure that, in many cases, there are, so to speak, political efforts made to achieve these ends and, you know, well justified.

One of the groups that are solicited every year for solicitation are all the Nobel laureates. They are mailed forms to send in.

Q They normally make suggestions?

I have never made suggestions on this.

Q When did you first know that you were under consideration for the Nobel Prize?

A One thing that suggested this was the -when I won the Comstock Prize from the National
Academy of Sciences four or five years before, it had
been noted that 50 percent of the people that won
that prize in the past also won Nobel Prizes probably
later.

That was a measurement of one judgment.

There had been some rumors about it around, too.

Q The actual knowledge that you had won was not known until December of 1956 or was that earlier?

A October.

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1	Q The announcements were made
2	A The announcements come out in October.
3	Q And then the ceremony itself takes place
4	in December?
5	A The climax of the ceremony takes place
6	on the 10th of December.
7	Q That is when you participate along with
8	the other two co-winners?
9	A Yes, the co-winners in chemistry,
10	medicine and physiology, also. Those were awarded in
11	Stockholm. The Peace Prize is in Oslo I'm sorry,
12	also literature.
13	Q Literature was at the same time as these
14	other awards?
15	A Yes.
16	Q There is a military award, is there not,
17	associated with the Nobel?
18	A Yes. The investments are apparently
19	pretty good. It's up by about four times, now, I
20	think, than it was when I came in.
21	Q When you came in, it was what?
22	A Thirty-nine thousand split three ways.
23	Q That would have been an even third?
24	A An even third, yes.
25	Q I have seen it written about your

commenting on the order of the persons named as far as the award of the Nobel. Is there anything significant to the order?

A They are very frequently in alphabetical order. I regard this as representing some shade of judgment.

Q The fact that Shockley preceded earlier letters of the alphabet --

A I don't believe it was run as the -- the ballot is said to be done in California in which a set of random numbers are produced to list the candidates on the ballot.

Q What you are referring to is some shade of judgment that you think Shockley preceded some other bearers of the alphabet in the awarding of the Nobel Prize?

A I would think that.

Q Did that change your life significantly?

A Well, I think it may have in the sense that I was asked to participate in a number of things, to sign various statements and so on.

One item which is much related to the subject matter that brings us here today was an invitation to appear at a planned parenthood meeting

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in Piedmont, California, which is one of the documents that I included in this, the press release for that meeting.

What year was that?

I think that was 1963, but I don't know whether I have that that I brought along or not. I believe I do -- no, I'm wrong. It's 1964, February 7th.

That was an invitation -- could I see it momentarily to refresh my recollection?

(Whereupon, the witness hands over document to Mr. Adamson.)

> Q Thank you.

That is the first time I dealt with the dysgenics issue, but I did not use the word.

From the time of the press conferences Q in 1948 until December 10th, 1956 -- correction, from the time of the press conference in 1948 that was held to announce the significant developments with respect to the transistor, until the announcement in connection with the Nobel Prize in October of 1956. did your name sometimes, never, frequently, infrequently, appear in publications?

Try that again. I don't know how to weigh that.

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 do is establish how much more notoriety comes about because of the Nobel Prize and I'm trying to measure the amount of publicity, general publicity, that might accrue to a recognized scientist even prior to the Nobel Prize and how much accrues to a Nobel laureate after the prize is announced or awarded.

I would like to do that in personal

probably just speak out on this. What I'm trying to

Actually, it's better for you to

terms to Dr. William Shockley who was, obviously, mentioned in the July, 1948, press conference and whether that, in itself, seemed to be the progenitor of a good deal of or some or little or no personal publicity.

A Well, I think you're asking what is the

-- what is one's relative public impact for having

made an invention of a transistor compared to having

made the Nobel Prize, is that a way to put it?

Q I'm trying to do it in terms of Dr. William Shockley, though, from 1948 to 1956. Did your name, picture, whatever, appear in the newspaper articles at all?

A Let's see. Sometime about 1946 or 1947, there was a certain amount of publicity and a picture appearing in a number of articles when Secretary

Patterson of the Army pinned the medal for merit on 1 me. 2 Q That was 1953? 3 No, that was earlier than 1953. 4 was around -- within a year or so after the end of 5 the war, 1946 or '47. That was one occasion. 6 Was there a citation associated with 7 Q 8 that medal? 9 A Yes. 10 General or specific? It was specific, making reference to 11 contributions to the B-29's and so on, signed by 12 13 President Truman. Why don't we relate what else you 14 remember as far as your name or picture appearing in 15 the newspaper prior to the announcement with respect 16 17 to the Nobel? Let's see. I don't remember -- there 18 may have been some things. I don't recall whether 19 there was something written when I became a visiting 20 professor at Cal Tech or not. There was some 21 22 write-up in the press about that Piedmont affair. 23 That would have been after the Nobel? 0 24 That's right, after the Nobel. 25 I'm trying to separate that news 0

editing landmark as far as time. 1 No, nothing much occurs to me now. 2 Q Again, prior to the award of the Nobel 3 Prize --A There was probably something in respect 5 to the IRE Award, but there was certainly not much 6 concern with those. 7 8 Q Again, prior to the award of the Nobel, and we discussed an earlier period of time about your 9 10 memberships in association, whether scientific, 11 political, cultural or whatever, in the period you 12 returned to Bell in 1945 until the Nobel announcement 13 took place, were there other associations other than 14 the ones you already mentioned of a scientific nature 15 that you became a member of? 16 You're asking about publicity that 17 occurred in connection with these things, news 18 stories? 19 20

I have jumped away from that. assume the answer to the publicity is that you recall nothing specifically, but you named several events where there may have been small notices or items in the newspapers?

> A Yes.

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The new subject which is returning to Q

an old subject is something we talked about before, 3 4 5 6

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all memberships at an earlier time period of your I'm trying to designate another time period of your life which is the time you returned to Bell and the time you were at Cal Tech, the time you were visiting -- the time you were a Director of the weapon systems evaluation group.

From late 1945 until October of 1956 when the Nobel announcement was made, were there any other scientific associations, organizations, groups, bodies, that you became a member of?

Oh, there is one that I had forgotten about. I think they have dropped me from it as far as activity, but I was willing to accept a membership in some group in India which was the India Association for the Advancement of Science or something of this sort.

> This was while you were in India? Q

No. later. It was definitely later than It was while I was at Stanford. I don't remember much about the circumstances, but I was willing to lend my name if it would contribute something to the progress and prestige and self-confidence of science in India.

> This would have been at a later period? Q

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This was when I was at Stanford. A Yes. I don't know whether this was after the Nobel Prize or -- it probably is, yes, because I had become a professor at Stanford before the prize was -- no. that is wrong.

I tell you, I did leave out one aspect of this thing and that is that around 1956, I became a -- I was not a professor, was not on the Stanford payroll, but I became what is maybe called a visiting instructor.

This was while you were engaged in Q business activities?

> Yes. A

I take it that your job as visiting 0 instructor was a part-time job?

It was a non-pay job. It was simply an affiliation with the University. One thing it accomplished was it gave one legal access to the swimming pool.

I can certainly understand the Q importance of that. You think that was --

I don't remember when that was. I used to be on the mailing list and get material which was not of much interest to me and I think they dropped me.

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Again, let's see if we can focus on that Q Between 1945 and 1956. I'm using. one time. obviously, the award of the Nobel as sort of a landmark period as it would be in anyone's life. makes it a convenient cut-off time for no particular reason other than that because it's such an epic importance.

During that time period, 1945 to October, 1956, other than what we have already talked about, and possibly the India society and possibly -well, we know about the scientific organizations you named, but are there any other organizations or associations that you can think of that you were a member of or active in, participate in, any meetings, events, on behalf of --

Well, one organization that I gave some thinking about and loaned my name to is the Society For Humane Abortion. I don't know what kind of an organization it had, but I know some of the people that were running it and were involved in it.

I found myself in great sympathy with their aims. I don't know whether they ever put my name on a piece of paper that was published or not.

You think that was even prior to the Nobel award?

A I have got to back off on that. I don't remember the dates on that one, either.

Let me think. I'm afraid that is after. You are trying to focus on whether I had some organizational connection with some kind of groups with political flavor, I think, something of that sort?

Q Or scientific or cultural, other than what we have already named. You named one you were a member of since you were an undergraduate?

A The IEEE was one I joined sometime around 1950 or 1951.

Q Are you still a member of that as well?

A Yes.

Q I assume that's been continuous since that time?

A Yes. Those are the two that have been continuous. I just can't think of other ones.

I had this vague recollection of -- I told you about something that might be questionable, but whether I really belonged to it or not, I don't know. There is just a vague recollection there.

Q What about the Republican Party? At some point, you became a registered Republican; did you make political contributions?

A I don't remember making political contributions probably until after I won the Nobel Prize.

Q Were you active at all in politics?

A No.

Q Did you ever attend precinct meetings or club meetings?

A No.

Q Did you become involved or support actively any political candidate?

A I don't recall doing this, going around ringing doorbells or anything like that.

Q Is it fair to say that ever since you became a Republican, whenever that was, you fairly strictly voted for Republican candidates for public office?

A I think so. I think I voted for Republican candidates versus Roosevelt, for example, which is about as far back as I can go.

Q And on thereafter?

A However, had I felt there was -- let me take that back. I think I voted for Johnson and not Goldwater.

Q I would like to ask you to explain, if you recall, what it was that --

A There had been some very adverse things said about Johnson. I did a little research on this and it seems to me some of those things didn't stand up. I think I was caught in the war of hysteria that went along with Goldwater.

It was pointed out to me that there was a slogan that was being used that said a vote for Goldwater was a vote for 100,000 soldiers in Vietnam before Christmas, something of this sort, and Johnson said none, so Johnson was elected and there they were, essentially.

(Whereupon, a recess was taken.)

Q (By Mr. Adamson) Let me ask the same question, now, Dr. Shockley, with respect to any organizations or groups or associations with which you may have been a member or affiliated or active in for the post-Nobel period to the present.

A There is one that I think I may have been listed on, but I don't remember ever signing anything going along with this. There is an organization related to -- an organization called Liberty Lobby and they publish a tabloid called the National Spotlight.

They're definitely trying to influence public opinion in Congress on a number of conservative

causes; however, they had degrees of anti-Semitism, as I recall, which I'm entirely out of sympathy with.

I think they sent me some material from what was called the Board of Advisors. Somehow I may have gotten listed on that Board of Advisors.

The thing I'm pretty sure of is I never signed anything saying I was willing to have been listed there. I may have mailed something back.

Q Did you ask them to delist you?

A No, I did not ask them to delist me, but I don't remember whether I saw the -- I am thinking there was something there that might show up. It looks as if I had associated myself far more with this kind of cause than I have.

Q Do they continue to list your name?

A I don't recall seeing a specific listing of names with my name listed, but I remember I got things saying "to our Board of Advisors," or whatever it is, something addressed that way.

Q Do you still get those?

A No, I have not made any payments for some time. I'm off the list of the National Spotlight. They also publish something else called The American Mercury.

I don't recall if I'm still getting 1 copies of that or not, but I have not contributed to it lately. 3 Q Could you possibly date approximately 4 when this was taking place? 5 It would be a very rough guess. I would 6 say three or four years ago. 7 Q For how long a period of time did you 8 receive 10 The National Spotlight? 11 Yes. 0 12 Maybe three years. 13 Was it a similar period that you 0 14 received correspondence addressed to the National Board of Advisors, approximately three years? 15 16 Something like that. 17 Even though, by your own characteriza-0 18 tion, the group had some manifestations of anti-Semitism, you took no effort to disassociate 19 yourself from being called, at least, by --20 There wasn't any evidence this had been 21 A I'm inferring this may have happened. 22 occurring. 23 don't recall seeing my name on a list. 24 When you say there is or was this Q

possible manifestation of anti-Semitism, to what do

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you refer?

A I have not thought very much about this thing lately. It probably has articles such as one has seen coming from other sources recently of maybe Jewish control of the news media that, in my opinion, may be overplaying that and possibly a very anti-Israel attitude; however, this journal does sometimes carry news.

One of the things that I found quite interesting about them was the information they furnished on the Bilderburger meetings.

Q What are those?

A You see almost nothing in the press on these. I think that the documentation on this seems quite convincing and they have included some things which have appeared in the <u>Congressional Record</u>, but this is generally something you do not see in the press.

This involves the Rothchilds in France, perhaps, and somebody who was one of the leading men in Holland, in the royal family, being one of the people that organized this.

The first meeting took place in a hotel called the Bilderburger Hotel. That is where it gets its name.

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Q These are held annually?

A Annually or ever two years, something like that. This includes very reputable national leaders from the United States at these meetings.

Q Such as?

A It might not be the Secretary of State, but might be some of the Rockefellers in the banking business. I wouldn't have a judgment as to whether this might not just be an occasion for exchanging ideas, but the liberty lobby interpretation was that this was a means of exploiting the general public in gathering maybe -- well, maybe anticipating financial changes, that sort of thing.

This was an example of one sort of item which was given much more play in the National Spotlight than I ever saw in the regular press.

I remember seeing one or two very brief mentions of it. These meetings are held, according to the <u>Spotlight</u> story, in very secret surroundings with security furnished by the nation in which they exist.

One of my reasons for continuing to receive this material was it sometimes produces information that I do not see anywhere else.

Q Did you merely subscribe to this or did

A Yes.

Q To whom have you made political contributions?

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A Well, to Jesse Helms' organization and to some of the Reagan backed things and the Republican Party.

Q When do you remember making your first contribution to the National Republican Party?

A I would say within the last five years.

Q But most of those political contributions that you are referring to have been in the last five years?

A Yes, I think so.

Q Almost all?

A I would think almost all.

Q What is the Jesse Helms Political Organization?

A Jesse Helms has some organization which runs up in North Carolina, I believe, the National Congressional Aid Committee or something like that.

That's not exactly right.

This committee gathers funds to help support the elections of people with whom Helms is sympathetic.

Q How much money would you say you have contributed to that organization?

A Well, I would say probably more than one hundred, less than five hundred.

What about the other political Q 1 organizations that you have referred to? Do you remember what any of those were? Well, there is maybe one put out by the U.S. Senate, a Mr. Philip Vanderjack. 5 Is that Congressman Vanderjack? Q 6 I have made contributions to him. 7 You have made contributions to 8 Congressman Vanderjack? 9 To his organization. A 10 How much have you contributed, 11 0 12 approximately? Oh, perhaps one hundred, maybe two 13 Α 14 hundred. What others that you can recall? 15 Well, recently I contributed \$120 to 16 A this Reagan task force. 17 What is the Reagan task force? 18 Well, it's an organization that Reagan 19 set up and it's a very highly publicized thing in 20 terms of -- well, very highly promoted, I should say, 21 in terms of letters because I got about five of them 22 after I sent the first funds in. I'm on the mailing 23 list and I put that in the return paid envelope and 24

sent it back. I'm in sympathy with Reagan's

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programs generally, so what would contribute to that was a thing I was inclined to support. 2 I don't know about the task force. 3 is it designed to do? 4 It's designed to promulgate the ideas 5 that Reagan has and give support, I believe, maybe to candidates and educate the public. 7 0 8 Who runs it? A I don't remember. 9 It's not the Republican Party? 10 Q 11 12

No, I don't think it's the Republican Party. The name Packwood, I believe, Senator Packwood is the one that signs the letters that come out from it.

How much money have you contributed to it, as you recall?

One hundred twenty dollars. You can pay \$10 a month or whatever. There may be others, too.

I'm sometimes moved by these things and act on them. They're not usually a matter I take very seriously. I put my interest in these well behind my interest in the matters that bring me here today.

These political organizations are advancing political causes?

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A Yes.

Q Have you actually authorized any of these organizations or others to use your name?

A I don't remember too clearly. I don't think -- I think I have not. I might have.

Q You might have?

A I might have.

Q But you have no recollection whether you authorized any organization to use your name?

A Well, it seems rather unlikely that -well, yes, come to think of it. There is one more
recently having to do with, I believe, the Sakharov
situation. What was the organization that I
responded to recently? It was --

Q You're referring to the Nobel laureate from Russia?

A That, I think, may be the one. This looked like a good -- you're talking about Sakharov, now?

Q Yes, Sakharov.

A I loaned my name to an organization which held a meeting in the interest of Sakharov in Holland. I went to that meeting, wrote a paper which I presented at that meeting, so I certainly loaned my name to that one.

- Q When was that, Doctor?
- A 1980, I think.
- Q This was an organization trying to bring public attention to --
 - A To the Sakharov situation?
- Q -- to the overall problem of his persecution.
 - A Right.
 - Q Any other organizations?
- A That's not the same one I was mentioning. Recently, within the last month, and this one I responded to by telephone, they were trying to get as many Nobel laureates to support this thing as possible.

It was something going on in Russia in which they wanted to make a position. They read me the names. I asked them to read me the names of some of the Nobel laureates they had. One was a man at Stanford for whom I had a great deal of respect and that was Robert Hoffstetter.

- Q This struck you as an organization that was concerned with something concerning the problem of persecution and the like?
 - A That sort of thing, yes.
 - Q I want to be clear. We're talking about

your whole life, now, in terms of organizations, associations, groups and the like to which you may have loaned your name for whatever purpose, or organizations that you have been a member of, that you have attended meetings of as a participant, not necessarily as a speaker, but a participant?

A I have tried to recall the ones that I have. Some of these, like the Society For Humane Abortion, for example, was a more deliberate decision that I may have made than in some other cases.

The National Abortion Rights League wanted my name and I supported that. If you have some things that might suggest particular ones, it might refresh me.

Q Okay.

A I'm trying to dig them out since it's something I don't try to keep on tap.

Q Let's go back, if we might, to 1955,

June, when you left the Pentagon after your one-year position. Let's go through the period 1955 through 1963 in which it's generally described as being associated with various business activities in California.

You said you wanted to be in your own business and you married a little later on

Thanksgiving Day of that year.

Tell us about what kind of business you set up?

something in the transistor field, although I had been very much out of touch with it for 15 months. This may not have been wise from that point of view. but I looked around for various sources of financial backing, and the one that I selected was in California and the head was Arnold Beckman who was a Cal Tech professor and built up his business by manufacturing and starting in a garage and had been quite successful and I came to an agreement with him and started to recruit people.

Q What was your agreement with him?

A I don't remember the exact business details now, but it was -- it involved options in Beckman Instruments and an arrangement whereby they would furnish funds to set this organization up.

I believe, this being a separate organization, I believe we got this far, that there might have been some aspect that involved stock divisions by the members. I'm not positive how that divided up as far as being separate from Beckman and being part of Beckman.

Q What would you characterize as the mission of this organization?

A To accomplish some new, useful and marketable things in the transistor field.

Q You began to do this and what happened?

A Well, I was not the optimum director of such an organization, obviously, and we did recruit some very able people and I believe my handling of it led to some dissatisfaction and some of these people endeavored to get me completely put out of the act.

Q Dissatisfaction on the part of the people you recruited, you mean?

A Yes.

Q These were scientists?

A Right, or electrical engineers or mechanical engineers. The result was that I did get fired from the situation and these people found other sources of funds, particularly Fairchild, and they set up the Fairchild semi-conductor division.

Beckman later on sold my unit to the Clevite Corporation, so my relationships were substantially better. Clevite ran into some substantial problems not entirely with its semi-conductor activities, but it's also a manufacturer of piston rings and other automobile

parts and torpedoes, for example, for the military branch.

They decided to dispose of the organization of which I was a part, and it was sold to ITT. I did consulting with ITT and separated from this in 1963 when I became a professor on the regular Stanford faculty.

Q Back in 1955, again, when you were organizing Beckman Instruments and were recruiting people, what was your position? Were you the president, chief executive officer, what?

A I was certainly the chief executive officer of this division. I don't know when I was listed as president.

It did become the Shockley Transistor

Corporation which was a semi-subsidiary and I think I

was a president of that.

Q What caused the problem with the people you recruited?

A I'm not sure I understood it very well.

If I had understood it better, maybe I would have avoided it.

Q What did they say?

A Well, one thing they said was that I was not putting enough emphasis on transistors per se

but, rather, another device which I thought might be manufactured more simply and might have a large role to play called the four layer diode. 3 Q Did Shockley Transistor then begin to 4 make that particular diode? 5 Yes. 6 7 Q Successfully? 8 People bought them and, in the last year, I had people calling up saying, "Where can we get some more of these." They have not been 10

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manufactured in at least 10 years. How long were you associated with Beckman before he spun it off to this other company?

I don't remember the exact time, but from the fall of 1955 to 1961 or '62, but I don't have the time frame in mind.

It was a good while before he made that Q second spin-off that you referred to?

Yes. I can fix the date, I think -well, maybe I cannot. I think the spin-off occurred in 1959. I'm not positive that that date is right.

Did you continue as chief executive officer or president of the second company -- of the same company under the second ownership. I should say?

A Under the Clevite arrangement, I was not in the position of president. I was reporting to the man that headed their Massachusetts semi-conductor unit and I don't remember what my title was then. How large was this company? What was 5 the largest it became in terms of number of employees prior to the spin-off to the Clevite Company? T I don't remember, but on the order of 8 one hundred. Was it approximately the same size under 10 the Clevite Company? 11 I think it was. 12 Similarly, under ITT? 13 Q Well, there was not any immediate 14 change, but then ITT, I think, wished to move the 15 activities to Florida and there was some attrition of 16 people leaving at that time. 17 Did they, in fact, do that? 18 Q I don't know. It's my impression they 19 A 30 did. You had already left? 21 0 No, I was not following these things 99 A closely or at least it was not a matter that I tried 23 to keep track of very insidiously. 24 Did you have the same position of chief

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Q

1	executive officer under ITT?
2	A No, I did not.
3	Q What was your position?
4	A I think I was a consultant to them.
5	Q Was that a full-time position?
6	A No, it was not.
7	Q How much of your time were you devoting
8	to that?
9	A I forget whether there was a maximum set
10	on this. At that time, I was let's see. I don't
11	remember this. I'm pretty sure it was in 1963 that I
12	became a regular professor at Stanford, but on a
13	part-time basis, so I don't remember that.
14	Q The company, at that time, was that in
15	1963 when you became a professor on a part-time basis
16	and you were affiliated with the company in some
17	capacity?
18	A With ITT. I think I was a consultant to
19	them.
20	Q You just don't recall how much time you
21	were devoting to the company versus to Stanford?
22	A No.
23	Q What were you doing when you started
24	part time with Stanford in 1963? Were you teaching
25	in the graduate school?

1	A Yes. It was an appointment as far as
2	electrical engineering, teaching in the graduate
3	school.
4	Q That was part time?
5	A Also part time.
6	Q Did you immediately start teaching a
7	course or several courses or a seminar or what?
8	A I taught one course, I think.
9	Q When did that convert to being full time
10	at Stanford?
11	A It never did.
12	Q Never did from 1963 through 1975?
13	A That's right.
14	Q Did it vary in terms of the amount of
15	time that you devoted to that activity?
16	A The same agreement held throughout this
17	entire period, so the time I would have spent in the
18	office may have varied depending on other interests,
19	what other things I was doing.
20	Q Was there a fairly constant course load
21	that you were taking?
22	A Well, no, that was not the case because,
23	in 1965, I think, the Itebasia
24	started and I volunteered to teach in this so, for a

number of years, I would teach two evenings a week,

two groups of about 10 students each that were freshmen. Q Undergraduate freshmen? 3 Yes. 4 Was tht the first time you had taught 5 undergraduates since you had taught an undergraduate 6 course at MIT immediately upon your graduation from that institution? 8 Yes, I think it was. 9 You started that in 1965? Q 10 Yes. 11 That would have been in addition to your 12 regular course work? 13 Yes. 14 A You were teaching in the graduate 15 0 16 school? 17 That's right. In any given academic period from 1965 18 0 to 1975 at Stanford, what was the average teaching 19 20 load that you carried? First of all, it was the freshmen 21 seminar which was what? Was that physics? 22 It was called mental tools for 23 A scientific thinking, is the title I used. 24 You had a group of how many students? 25 Q

A I think it was limited to eight or 10, might have been 12. I think it was 10 in each unit.

Q Was that a course that academic credit was given for?

A Yes.

Q Was the subject matter of the course approved by the University, for example, and my question is vague, but is there an academic sanctioning body that approved reading lists, for example?

A Not in the case of the freshman seminar.

Q By inference, is that the case with respect to the graduate programs you were teaching or not?

A I don't think so.

Q In terms of the academic side, and I'm going to ask you a lot of questions, I think, that may seem naive, but it's simply because I don't know that much about it, but in terms of the course you were teaching from 1963 to 1975 at Stanford in the undergraduate program, were you told the general subject matter of that course by a governing body at the college?

A No. I selected the subject matter.

Q You entitled it and did you present to some governing body of the college or university what you were going to cover in that subject to which the university was going to award its approval?

A The thing that came nearest to that, I think, was a description of the course that was written to appear in a catalog that the students could look at in selecting the course.

Q Is there anybody that approves that in terms of Stanford University, though? Is there a college of faculty that approves that or anybody like that?

A Not that I recall.

Q Is the same true of the freshmen eminar? Is that something all freshmen take?

A No, it's an optional thing. One of the objectives was to bring the students into contact with some of the senior professors which they would not otherwise have had.

Q Generally, how much time would you say of your time is devoted or was devoted during this period, 1963 to '75, to your academic work?

A Probably not more than two days a week.

Q So, something less than 30 percent of

1	A I think that's right, yes.
2	Q 1965 through 1975, I think you said, you
3	were also an executive consultant to Bell
4	Laboratories?
5	A Yes.
6	Q What did that involve?
7	A That involved many trips from the East
8	Coast to the West Coast to the East Coast, meeting
9	with people at Bell Laboratories, looking at things
10	that I might make a contribution to.
11	Q Was this a salaried position?
12	A Yes.
13	Q But it was calculated on a part-time
14	basis?
15	A That's right.
16	Q Was there a maximum or a minimum of time
17	that you were to devote in this consulting capacity
18	at Bell?
19	A This was supposed to be approximately
20	half time.
21	Q Was there another percentage of your
22	time that we have not accounted for?
23	A Yes.
24	Q Which was what?
25	A What I chose to do myself.

I guess we might fairly characterize that as the subject matter we are here for or do you mean something else?

A Well, there were other things I was interested in.

Let's quickly do that. We are beyond the time where we said we would give you a break and the reporter a break, but quickly tell us what other kinds of activities might there be other than Stanford, Bell Laboratories and, shall we say, dysgenics, to use your word?

A I took sailboating rather seriously for a while.

Q Anything else?

A Not so much gardening. I also endeavored to develop some investment policies and act on those. That took quite a lot of time. It was not very effective.

Q Let's talk about your compensation.

Were you under contract or tenure or what at Stanford during the time you were there or both?

A I would say it was probably both. There was a written agreement which specified what my duties would be and the committed time and so on which, as I recall, was one day a week for the

commitment and then there were standard raises on the basis, perhaps, of the cost of living which is something that occurred.

Q Is that fairly standard throughout the University for that kind of arrangement?

A I don't know if that was very standard in my case. There may have been other ones, but I'm not acquainted with them.

Q Was this something you sought to bargain for yourself so you would have this time for yourself, for your activities and interests, or was this something Stanford wanted?

A I wanted this degree of flexibility.

Q I have seen many times an associate chair that you occupied at Stanford?

A Yes.

Q Could you tell us about that?

A The chair was named after the man who was the founder of Ampex, Alexander M. Poniatoff, P-o-n-i-a-t-o-f-f.

Q Ampex is what?

A That is the first company that made videotape recorders. This was one of their main products which got them in a very successful situation.

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Is this a family or --

A It was set up by a man named Joseph McMicking, M-c-M-i-c-k-i-n-g. He came in at some time and it may have been when Ampex was in trouble. but I'm not sure that's the case. At any rate, he was the Chairman of the Board of Ampex.

He is a man of wide ranging financial interests, and the salary for the Chairman of the Board was subject to sufficient tax, but that was not of any great importance to him and for some number of years, you know, he donated his salary to Stanford, donated it to this chair.

Q Was there somebody that occupied this chair prior to you?

A It was not a very large contribution for a chair. I believe the funds that were in there were just sufficient to maintain the chair for the length of time I had shead of me at Stanford. I believe there were no funds left and there has been no second appointment.

Q You are the only person that ever occupied it?

A The only person that ever has or will.

Q Did the founder of this create it specifically for you in mind to occupy it?

	A Do I still what?
1	Q Receive money today?
2	T have received no compensation
3	70
4	from Stanford since about the end of August of 1975.
5	Q That is when you retired?
6	A Yes.
7	Q Approximately what was your compensation
8	arrangement with Bell Laboratories where you were
9	asked to spend about 50 percent of your time during
10	this period?
11	A Oh, this got into, as I recall, about
12	\$40,000 a year.
13	Q It was fairly constant through that
14	period, too?
15	A Pretty much so, yes.
16	Q 1965 through 1975?
17	A Yes.
18	Q That, of course, was separate and apart
19	from this Stanford compensation?
20	A That's right.
21	Q Was there other bases for compensation
22	that you received during that period? Were there
23	other monies that you received on a regular basis
24	from 1963 through 1975?
25	A Nothing on a regular basis, no earned

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income on a regular basis.
1
                Maybe an occasional honorarium for a
2
  speech or something like that?
                Yes.
        A
4
                Was that of any signficance?
5
                Well, some of the honorariums I received
6
  for speaking were -- I insisted it not be given to me
  but donated to my foundation.
                What you call FREED?
9
                Yes.
10
                We'll talk about that in a little bit.
        Q
11
  What about yourself?
12
                It was certainly not a significant
13
  factor in my financial affairs.
                A few thousand dollars at most a year or
15
16
  even that much?
17
                I think at most it would be that.
  think that would cover it.
                We are talking about 1963 through 1975.
19
  In 1975, you retired from Stanford?
20
21
         A
                Yes.
22
                Have you taught at all at Stanford since
         0
23
  1975?
24
         A
                No.
                You have received no monies from
25
         Q
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Stanford since 1975? 1 No. 2 Do you have any affiliation by name or 0 otherwise with Stanford? 3 My name appears in the telephone 5 directory as an emeritus professor and I have an office which I have maintained. Does Stanford help finance that? Q 8 There is no rent for the office. 9 How about secretarial personnel? 0 10 No secretarial personnel. 11 Do you have access to secretarial 0 12 personnel? 13 No. A 14 Do they maintain a telephone for you? 0 15 They maintain a telephone, but anything 16 other than local calls, you know, I pay for. Have you had any affiliation with Bell 18 Laboratories since 1975? 19 No. A 20 Do you receive any compensation from 21 22 Be11? I don't receive a pension from Stanford. 23 A I receive it from this fund designed for this 24 25

purpose.

There is some sort of an investment fund to which probably your salary goes while at Stanford, the TIA and the CREF, Teachers Insurance Annuity or something. I don't know what the letters stand for.

CREF is another one. One is more conservatively aimed at reliable income. CREF is supposed to be more speculative with the hopes of capital gains.

Q While you were occupying this particular chair, a portion of your income went into these two funds which are, in effect, pension funds?

A That is correct.

Q You receive money from these funds, these two funds, today?

A Yes.

Q Can you estimate what that was from 1975 to the current time, what you have received from these two funds?

A I would much rather call up my accountant and ask him to look at the IRS returns.

Q We probably will request that. If you can give me an estimate, though, just for purposes of talking. I would appreciate it. It may help us understand a bit about your life picture that we are drawing.

Roughly speaking now, subject to verification, what is it? I think the Stanford University thing is 3 running on the order of something like, oh, \$4,000 a I don't think it has changed. That is a fairly constant figure each Q 6 year? Yes. A 8 For the last five years? 0 9 Yes. 10 It's stayed pretty much the same? Q 11 Correct, and I think the Bell 12 Laboratories is something on the order of, say, eighteen thousand. 15 Any other basis of income? 0 16 Yes, there are several. 17 The Bell money is also fairly constant? Q 18 There is no variable on that or is there a variable? 19 Does that mean if I can withdraw a 20 capital from it or something of this sort? 21 Q Does it depend on interest rates Right. 22 or is there any flexibility given to it? 23 There is some attempt to allow for cost of living adjustments. They do upgrade on that basis and, of course, Social Security, too.

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least those three sources of
 eurrent income for the last five years are relatively
 constant?
             Correct.
             There is no change in those?
      Q
             Correct.
             Any other sources of income?
      Q
             A very substantial source of income
 which I think went into the 1980 tax return resulting
from capital gains on an acre of land sold in
 Hawaii.
             When was that sold?
      Q
             When was it sold?
             Yes.
      Q
             I don't remember. I think it was
 sometime in 1980 that we got paid. It got in the
 1980 tax.
             When you say "we," are you referring to
      Q
 you and your wife?
             Yes.
      Q
             How much did that sell for?
      ٨
             As I recall, it was $375,000.
      Q
             When did you acquire that?
                                It was sometime around
             Oh, my goodness.
 1960.
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What were the circumstances of that?

A Well, a man that I knew had an

opportunity to buy two adjacent acres as a package in Hawaii, so he bought one and I bought the other one.

Q Any other sources of income?

A Well, I inherited a trust fund account from my mother when she died in 1977 and I had some security interests that had come as a result of stock options with Beckman Instruments. The result is that we have two accounts with financial managers in New York, one from the funds of my mother's estate, which is in my sole name, and the other one in the name of my wife and myself.

Q Do you have any other sources of income?

A There are two other smaller custodial accounts in banks in California.

Q Any other sources of income?

Particularly, it has been written that you enjoy income from some of the patents.

A There is no trace of truth whatsoever to that. The statement in <u>Hustler</u>, for example, that I became wealthy as a transistor manufacturer is without foundation.

Q I should ask, I suppose, because we

talked about this possibility, but did Bell award you in any way, shape or fashion any remuneration for the work on the transistor other than your salary or, at the time you received the Nobel prize, any special recognition of that or in any other way?

A No. I think that they dealt with me as they would any other member of the technical staff that had gone up the ladder. When I left in 1955, that terminated my interest in the Bell Lab's pension fund, but when I came back in 1965, after a certain period, I acquired that interest and added to it in terms of the length of employment that I had after that time.

MR. ADAMSON: It's 1:00 o'clock, which is later than we had talked about breaking, so let's give our reporter a lunch break and ourselves. We will reconvene in 45 minutes.

(Whereupon, the luncheon break was taken.)

Q (By Mr. Adamson) Now, you mentioned,
Dr. Shockley, two trust funds, I guess for lack of a
better word; one you inherited from your mother and
One that was a result of investments you had made as
a result of a sale or exchange of stock that you

made from Beckman.

Could you tell me what the average income to you generated by those two funds is?

A Oh, you mean dividends or total income?

Q Well, I don't know if it comes to you in the form of dividends or is actually funds generated to you --

A Well, something on the order of sixty thousand, I think.

Q Each year?

A Yes.

Q And that is pretty much a constant?

A Well, it's increased over the last eight years or so since the funds have been set up. The investments have been good and capital value has been increased.

Q I would like to turn our discussion to FREED, at this point. I will show you what I want identified as Defendants' Exhibit 366, a letter from the Internal Revenue Service which was produced by you in response to our discovery request.

(Whereupon, the court reporter marked Defendants' Exhibit No. 366 for identification.)

- Q (By Mr. Adamson) Now, this is the document that you presented to us; is that correct?
 - A Yes.
- Q What is the date of the granting of the tax exempt status?
 - A Well, I read April 19th, 1973, on here.
- Q Is that when you, in fact, organized and founded what we shall call for simplicity purposes as FREED?
- A No. I think FREED was organized before that. I don't remember the exact date. I think it mentions some of the people in here, the president, secretary. It shows the president, secretary, and quite possibly two directors, at that time.
- Q Is it correct to say that you were the founder of this?
- A Yes, I would think so: either that or the secretary was the founder. He did the legal work that led to the existence of this piece of paper.
- Q When I speak of founder, I'm speaking in a generic sense, the one being the inspiration or the source or the father of the organization, not

necessarily the technician.

A I am.

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Q What did you want to accomplish when you founded this foundation? What was its purpose?

A It was to be a vehicle for drawing public support to the objectives which I defined for FREED, which I described both in this (indicating) and in the letterhead of FREED stationery, which is listed as -- you probably have some of the FREED stationery there.

Q I think I have that. Is FREED the author of the statement that's on the letterhead?

A I think I can say I was principally the author.

Q This is probably a good time to just ask you what you mean by eugenics?

A By eugenics?

Q Yes.

A I don't use eugenics in the FREED

material, but eugenics is defined as, I think, using
the biological laws of nature in the breeding of

children to improve the quality of the race.

Q Eugenics is contained in the title?

A Yes, that's right, it is contained in the title. Our emphasis is particularly on

anti-dysgenics.

Q Would you please define, as you use it by that organization, dysgenics?

A The definition of dysgenics, which is not the dictionary's definition, is -- dysgenics is retrogressive evolution caused by the excessive reproduction of the genetically disadvantaged.

Q What is the dictionary definition?

A It is much the same meaning, but not describing the mechanisms. I think it's described both as the theory and as the action of reproductive patterns which lower quality.

Q Where does the word "dysgenics" come from?

A I don't recall, keeping in mind the dictionary's definition of the origin of the parts.

Q Has it been a word that's been recognized or used with some frequency?

A It's very seldom known to people. It's a concept which I feel is very important for society to recognize.

Q When you formed FREED with some of the individuals mentioned and some of the individuals that may be occasionally listed on your letterhead. did it have any money?

I'm trying to remember. It may be that 1 we had a contribution of something on the order of \$1,000 from someone to set things up. It was a 5 contribution of that sort that once came to Stanford. but it certainly had no large sum of money, mothing on the order of \$10,000. F Nothing on the order of that? 0 No. 5 You say it began with maybe \$1,000 that Đ, someone whom you don't remember contributed? 10 Or I might -- I have to be scrupulous 11 shout the contributions from the members of the 15 organization in keeping with the IRS requirements, so 35 I don't think it was a gift contribution from me. 14 don't remember the first contribution. 15 16 Does it have money now? 0 17 It is now in debt to me as a result of 18 my having made loans to it largely since my 15 retirement from the Stanford faculty. 2 How much money have you loaned to Q 7 FREED? 747 Something on the order of \$50.000. A 1 Since 1975? 0 2ϵ A Yes.

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Does it have a membership?

A No, it doesn't have a membership. It's the people you see on the letterhead. It has a president, a secretary, a treasurer and two members of the Board of Directors.

Q Could you identify the people and tell $$\rm me\ who\ they\ are?$

A I'm the president; the secretary is George S. Leonard who is a lawyer now situated in Alexandria. He was in Washington at the time this was organized.

There is a treasurer, which is Mrs. Shockley, my wife, and John deC.M. Saunders is the retired head of the University of California's medical school in San Francisco.

Q He is what?

A What is his position?

Q Yes.

A He is a member of the Board of Directors. Mr. Bennett is also a retired individual whose profession is in psychiatry and chemical psychiatry.

Q Has that group been the officers and directors of the organization from its inception?

A No, there have been other people listed there. The transfer of the treasurer to Mrs.

Shockley took place within the last year.

- Q Who was that treasurer prior to that?
- A It was Mr. Robert Frank, the man who heads the accounting firm and handles my taxes.
 - Q Any other changes?

- A That's the only one I can think of; otherwise, I think everything has been the same since this letterhead was printed in 1974.
 - Q What principally does FREED do?
- A FREED, at present, waits for greater opportunities to do things. At one time, it was more active in terms of getting out occasional newsletters.
- Q To whom would you send those newsletters?
- A To people who had -- by and large, people who had exhibited an interest and written in, not necessarily made any contribution.
- Q Do you have a list of the people or do you still have the mailing list?
- A We don't have an active mailing list. We have a mailing list that is dated some three or four years ago.
- Q How many people would you say are on that mailing list?

A Oh, I would think less than one thousand, more than two hundred.

Q How did you accumulate that mailing list?

A Well, no single method. I would occasionally be talking to people in social circumstances and the subject would come up and I would add their names to the mailing list and some people whom I would read about in the press or something like that, you know, I would communicate with, and other people that had encountered these, some of our mailings, would write to us and this would, again, add names.

Q Do you have press organizations as well that were --

A No, no press organizations.

Q I don't think we received any of the newsletters as part of our document request. Would they not be included in statements and articles by you for publication?

A The FREED newsletters included a number of the items which we did gather up in this last mailing which have been multilithed.

Q Is this what I have as Defendants' E_{xhibit} 364, which is dated 5/16/1981? Is that a

FREED newsletter? It is not, no. It doesn't say FREED 2 newsletter on it, nor does it have a number on it. 3 My copy does not have a number on it. Q 4 It has the number 508 under the FREED 5 letterhead. I see. 0 7 That means it was our reproduction 8 number 508. 9 MR. BAILEY: You're referring to a 10 letter in the upper right-hand corner of 11 Defendants' Exhibit 364? 12 13 THE WITNESS: Upper right-hand corner. 14 I'm also referring to a number --15 Q (By Mr. Adamson) Here (indicating)? 16 Yes, referring to that number which also 17 appears on the reproduction of the FREED letterhead 18 further on in the news area. 19 What is this? Is this not a newsletter? 20 It's a reproduction --21 22 23

It's a reproduction of an article which I wrote and some thoughts I have expressed about it.

Q This is different than a newsletter?

A Yes.

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I would like to see if I can find the Q

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newsletter so I know what we are talking about when you say a newsletter. Do you have one with you?

I'm not sure that I do. A

(Whereupon, a discussion ensued off the record.)

THE WITNESS: Here is one I think you have got, which is 503. What number do you have?

> MR. ADAMSON: 421.

THE WITNESS: That's not a FREED newsletter. It's designated by the description on them, FML-328.

MR. ADAMSON: I have seen this particular one you handed me.

- Q (By Mr. Adamson) This is a newsletter?
- Yes.
- You would mail these out periodically? Q
- I wouldn't say periodically. A
- This one has a number printed at the Q top, 503, entitled Sperm Banks, The Phil Donahue Show and so on. How many would you say you have mailed Out?
 - My belief is 508 -- what's the number? A
 - Q 503.
 - A This was the five hundred and third that

we reproduced on the multilith press and it was also the 28th newsletter. I'm not sure if there was a the in the newsletter numbering at one stage.

They were at one time called FSM, which stands for FREED Transcriber Monthly.

MR. BAILEY: Mr. Shockley has brought with him the light blue colored FREED newsletter that we have been referring to and I'm going to make a Xerox copy of that and that will be marked Exhibit 367.

(Whereupon, the court reporter marked Defendants' Exhibit No. 367 for identification.)

Q (By Mr. Adamson) How much money, since FREED was created, has it raised?

A I don't have that number, but I would think it's on the order of ten to twenty thousand.

Q That obviously excludes, then, the \$50,000 you have loaned it?

A That's right.

Q You don't include that among the money that was raised?

A No.

Q You think it's around fifteen or \$20,000 all totaled since the history of it?

A Since the beginning. I wouldn't say necessarily 15 at the start. I bracketed 10.

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Q Do you, as its president, ever draw expenses from FREED?

A Yes, I think I have. They have been tather small. I have drawn -- well, it's not all that small because when I was doing some research on the Stanford computer, I paid for these expenses to Stanford from the FREED account and then if it got low, we would replenish these with additional loans.

Q Has FREED done other things other than send out newsletters, member subscriber letters or whatever it was called or multilith copies of articles?

A Yes, we have sent out multilith copies of articles that were not part of the newsletters, copies of the sort that were included in the last mailings I sent you. These have been done under rather individual circumstances.

Q Does FREED itself subscribe to publications?

A Yes. It has bought some reference books that I would not otherwise use. We have bought copies of Who's Who, the international Who's Who, through FREED.

Any other subscriptions?

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A I don't recall that I had subscribed to any periodical journals from FREED.

Q Has FREED ever sponsored any meetings either of its Board or members?

A The meetings of the Board have largely been conducted by telephone. I don't recall that we have held a public meeting.

No sponsorship of conferences, seminars, conclaves, forums, anything of that description?

A No. It's been more restricted to
sending out newsletters. There may have been some
press release activities which were charged to FREED
where I lectured and prepared a press release.

Q Does FREED have an office?

A It has an address. It is in my office.

Q What address is that?

A On the letterhead, it's a post office box. It has a legal office for a secretary, but I don't have that exactly in mind.

There was some change on that just before I left. Some correspondence came in which I'm not sure I processed yet involving someone who would be a reference for the IRS, so the secretary's office in Washington is a regular address.

Organizational secretary's office? Q Yes. poes it have a paid clerical kind of secretary? No. When you do mail something to your Q 1,000-person mailing list, who does it? My wife and myself. A You personally address the envelopes? Q We would personally address the envelopes, yes. Do you maintain a list of the persons who have actually contributed ten to twenty thousand dollars? Yes. 15 Let's leave FREED a moment and talk Q about you personally. Do you or your wife -- well, what publications do you subscribe to? The physical society journals, 19 A electrical engineering journals, U.S. News and World I subscribe to the Thunderbolt which is a southern newspaper. 23 That is a paid subscription? Q 24 That's a paid subscription. I did at

one time pay for the Spotlight, as I told you, but I

134 have ceased doing that. You mentioned the Spotlight; did you have any articles published in the Spotlight? No. Any articles about you? Q I'm quite sure there were articles about me or I was mentioned in the Spotlight. As far as I know, we have not reproduced any of those. Any other publications? 0 9 Other publications that we could provide A to you? Yes. Q Sunset Magazine, T.V. Guide, San A 13 Francisco Chronicle, Wall Street Journal. I can't think of any others right now. 15 16 Why the Thunderbolt? 17 The Thunderbolt, again, covers some 18 information that I don't see in other places. 19 Like what? 20 Well, it had an interesting article one 21 time about fund raising of Mr. Vickery, a very

conservative fund raiser.

Information that was not contained in Other publications?

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I didn't see it in other publications.

What else? Q What else does it have? Why you pay money every year to Q subscribe to it? Well, it represents a very different viewpoint with which I don't entirely agree. I agree with some parts of it, but it calls to the attention things that I may not otherwise come in contact with and occasionally I do find interest in it. How did you come to subscribe to the Q Thunderbolt? It was mailed to me to begin with, I think. I was put on a complimentary list. You had an opportunity to personally subscribe to it? Right. I got termination notices and finally decided to continue it. Have you ever published anything in the 0 Thunderbolt? 20 A No, I have not. Q Have there been articles about you in it? 23 A Yes. Would you say one article or several

articles?

I would think, over the time that I had heen in contact with it, probably half a dozen. Again, my review was quick in the last seek, but I don't recall any of those articles being part of --

None of these were things that we gultilithed. Our review of the file pockets in that s connection did not produce any of these.

You do have in your possession, then. additional articles about you and reviews with n respect to genetics, eugenics, dysgenics, et cetera?

I would not guarantee we have all of the ones that are in our possession. We have not made a H systematic --

What I understand is that you have produced simply those articles that you had multilithed for distribution?

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That is generally correct. In this last round of gathering, except for maybe a few things closely related to multilithed things such as press releases from Stanford, which I would not think you would regard as a publication, that's all.

Do you know any of the personnel that Worked for the Thunderbolt?

I believe I may have met one man very

briefly at a time when a disruption was going on at briefly of Georgia. I think he came up and the University of Georgia. I don't remember his name spoke to me at that time. I don't remember his name it may have been Field.

now. What did he say?

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He said he was glad to meet me. I don't

remember that he said anything else.

Q Do you know anything else about the people that put out <u>Thunderbolt</u>?

A No, nothing -- wait a minute. There is someone called Stoner who has had a number of problems.

O J. B. Stoner?

A Yes.

O Do you know who he is?

A No. I don't know the details very well on that, no.

Q Do you agree with the point of view of Thunderbolt?

A No. I think it is anti-Semitic and it has a hate organization, I think, in respect to blacks which was stated in <u>Playboy</u> magazine. I was not in sympathy with those aspects of their position.

Q What aspects of their position are you

in sympathy with?

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I'm in sympathy with their bringing out A leave relevant to racial differences in their facts relevant to the degree with which blacks are publications to the degree with which blacks are publication from crime problems.

I don't agree with the emphasis they place on that because it's generally anti-black whereas I think one should regard these matters that they're recording in the light of being tragedies that should concern us all.

Q Are you aware that Mr. Stoner is presently under conviction?

A I think I had heard that. It involved some church bombing or something.

Q I'm going to ask you --

A I don't remember what it was.

Q If I were to tell you it involved church bombings where a group of black children were killed, would that ring any bells with you?

A I would say I don't remember that. What I remember is what I said.

Q Have you ever met Mr. Stoner?

A No.

Q A lot of the articles which you submitted, of which there are many, many hundreds,

several hundreds, come from publications other than the ones that you named that you personally subscribe

to.

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By what means do you come by such

sticles?

Well, sometimes they are sent to me.

 $_{\rm Quite}$ a few of them come that way. Sometimes we hear $_{\rm about}$ them and run down the source and buy a copy.

We do get a number of clippings sent from various people and that is one of the sources. Some of these are reproduced.

Q Have you ever subscribed to a clipping service?

A No, I don't subscribe to a clipping service.

Q One of the publications that you showed us, which was reproduced, was from Leader's magazine, Defendants' Exhibit 364. What is that, Leader's

A That's described on the fourth page of that pamphlet which you are holding in your hand, you know, on the left-hand side. I don't think I can add much to that

Q You received this?

A Yes. As you will read, it indicates to

whom it is sent quarterly and circulated to whom it is sent quarterly and circulated to distinguished leaders and among these includes a Nobel laureate or leader in the science of the arts.

MR. BAILEY: The witness is referring to the fourth page of Defendants' Exhibit 364.

THE WITNESS: Actually, it's the sixth page.

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MR. BAILEY: You are right.

Q (By Mr. Adamson) I have also noticed that among the materials that you submitted were some transcripts of several television commentaries from radio and TV reports.

Do you regularly obtain such transcripts?

A No. They come from sources that I don't actually recall. There was one that came in just recently and this does not have to do with FREED, but has to do with my appearance on a station in San Prancisco recently and there was a transcript of that that came in. It may have come from the San Francisco News Service.

You also included a number of press releases which, similarly, were from Stanford. After you retired in 1975, did you still have the

sccessibility of the news service to issue press
sccessibility of the news service to issue press
releases on your behalf, Stanford News Service?
I'm trying to remember the circumstances

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A There was a press release in respect to this suit and I believe --

Q Your personal press release? I mean, you issued a press release and you are now about to tell me about that?

A I don't remember exactly how that was, but the news service has occasionally given me the benefit of a mailing, but not put on the letterhead of the news service.

Defendants' Exhibit 364, which contains the reproduction from Leader's magazine, in a letter signed by you, you make the statement, "The above publication led indirectly to the initiation of a project that may reveal the degree of suppression of free speech and objective inquiry about human quality problems."

That is dated June, 1981. What are you teferring to there?

I'm referring to the interview that was published about me in the San Jose Mercury news magazine of which you have a copy, I believe.

That is the project that is going to the the degree of suppression --

That's correct.

-- of free speech and objective

inquiry?

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A Yes.

Q What you are stating is that the publication of that article or that article made those revelations --

A That's correct.

Q -- about suppression of free speech?

A Yes, and it indeed did so.

Q What is in the context of the advice to President Reagan, which includes your advocacy of the voluntary sterilization bonus plan? Are you trying to suggest that your advice elicited a response from the United States Government?

A Where do I seem to suggest that?

Q By your saying that the article had accomplished certain things, I'm trying to find out what it accomplished, if the advice was this program, the voluntary sterilization bonus plan?

Was that the advice, what was largely

Written by staff writer Bunting, "My advice is there

Bust be something external done like a voluntary

sterilization bonus plan"? That is addressed to the president, "Something must be done, Mr. President." My question is has anything come from your advice? Not so far as I know. No response came to me from them. Actually, no response came to me from anybody about this. Do you know Lyndon LaRuche? Q Lyndon LaRuche? A Yes. Q I don't recall that name now. Did you know William Loeb? Q Yes, I knew William Loeb. Would you consider Mr. Loeb a personal 0 friend? Yes. How did you first meet Mr. Loeb? Q Mr. Loeb communicated with me around 1965 or so when I first got into the press with these matters. You began communicating with him Q

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You began communicating with him tegularly from that point on?

- A Not regularly, but freely.
- Once every few months?
- A It might be longer than that or

sometimes more frequently.

You would occasionally visit?

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We had a number of visits in the San grancisco Airport when he was passing through on his way to Nevada and, in May of 1980, my wife and I visited him and his wife at his home in Price

Crossing, Massachusetts.

Over the past 10 years, after the Nobel Prize, I should say, in 1956, did you receive sny other awards?

I think so.

What were some of those? Q

I'm not sure I can remember them When was the Distinguished Service Award accurately. That was -- they inaugurated those, at 15 at Cal Tech? that time.

I think, at that time, I certainly had a Nobel Prize and Charlie Townes, who was also there, at that time, had not. I don't remember the exact I can fix the date pretty accurately, though. It was either 1966 or 1967.

Then, in 1980, I received what I suppose hay be the second most distinguished award that I received which was the Institute of Electrical and Electronic Engineers Medal of Honor.

When was that?

That was received in May of 1980. That

was the occasion when I went to Boston and visited

Loeb. The meeting was in Boston.

Q Any others?

The most newsworthy one I did not

receive.

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O I assume you're talking about Leeds?

A That's right. There was another one somewhere in there, the William Exner Medal, which was an Austrian award.

Q Awarded in Austria?

A No. I did not have to travel there for that. Was there snything else? I don't keep a quick checklist so I may have missed something on here, but I don't remember another one at the moment.

Q Would you please tell us about the Leeds non-award, if I can say that?

A Well, Leeds wanted to honor me with respect to the transistor work. They wrote a letter and I accepted.

Q When was that?

A 1973.

Q That is when they wrote the letter?

A I'm not sure of the letter. The letter

nust have been written in 1972 because I was in England in February of 1973.

Leeds is what? Q

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That is one of the major British universities.

They indicated to you they wanted to Q give you what, now?

An honorary doctorate of science, I think.

What happened? Q

I went to England. I accepted, went to England to speak at a meeting of the British Electrical Engineering Society on the 25th anniversary of the transistor, which 48 plus 25 is 73, and the Vice-Chancellor of Leeds made contact with my hotel, left a message that he would like to meet with me and how about February 13th.

We met at the Carleton Club which is a prestigious British conservative club. He then made it clear, in the course of that conversation, that he would like for me to forget about the whole thing.

Q Did he tell you why?

He was rather roundabout about it, but it was obviously because -- it was something to the effect that they would not be aware of my other interests when this was awarded.

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- Q Your other interests?
- A In the genetics area.
- Q Your interests in that is the reason why he felt the degree would not be appropriate or what?

A He did not explain deeply his personal reasons. I'm not in a position to judge exactly what they were.

One can speculate on a large number, but he felt it would be best if I would then '-- I asked him the question frankly. I asked him, "Are you leading up to saying when I come to Leeds, you would like me to behave in some way other than I would naturally behave or are you leading up to saying you would like me to forget the whole thing"?

He said, "A frank question deserves a frank answer. We would like you to forget the whole thing."

There was some further conversation that went on after this.

Q You mean discussion about his reasons for this or what?

A Well, I discussed the fact that the intellectual -- in my opinion, the intellectual community was derelict in its responsibility to

society in failing to look at the questions I

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I questioned Lord Boyle on what his knowledge was, whether he was conversant with these things and cross-examined him on this.

He said, "Would you like to receive a letter about this?" I said, or I agreed it would be sy next step.

- Q Did you receive a letter?
- A Yes, some 10 days or so later.
- Q What did he say in the letter?

A By that time, the conclusion was very obvious from other things that went on in the meantime. Some main events took place in the meantime there, but his letter was not a very satisfactory or objective one.

I don't remember exactly how some parts of it went, but I know some points about his letter were quoted in an editorial I wrote in the Sunday London Times which is in the collection here, but he said -- he emphasized the voluntary sterilization bonus plan which I had discussed with him in London and had given him some of my writings on the subject at the time and his position was, "You have advocated the implementation of activities which stands

sgainst the value of" -- "against the human values for which Leeds has forever stood."

In other words, he had not -- he denied this was proposed as a thinking exercise.

O How did he think it was proposed?

A He said, "You have advocated the implementation", was I think his phrasing.

Q You think that would have made any difference, if he understood the difference between a thinking exercise and --

A I try to avoid thinking what other people would do and what their motivations would be on the hasis of how they think.

Q You still have Lord Boyle's letter?

A I think so.

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Q You said other events and high drama took place between the time you had the conversation with Lord Boyle at the Carleton Club and --

A My regard of this was that this was one more of the instances which I felt were very adverse to the future of society, the behavior of Leeds University, and to publicize this, call attention to it, you know, might be a useful thing.

I had a press conference the next day and I described this aspect of the story.

I think I read that you may have played tape recordings of your conversation with Lord Boyle?

A I recorded Lord Boyle.

Q Do you still have that tape recording or tape recordings?

A Yes.

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Q Then what happened after you held the press conference?

There were a lot of questions and one result was quite clearly that Leeds University was in a very awkward and embarrassing position which, in my opinion, it deserved and it finally came around to these things, but it was evident that they had not conducted themselves or conducted the whole situation in what might be regarded as a really sound way.

Q Have you received any other honorary degrees?

A Since then?

Q Since then or before?

A I received some before, but I don't think I have received any since then. I received one the University of Pennsylvania, one at Gustavus Adolphus College, one at Rutgers University.

Q Could you date when you received those?

That's going back a long time. A

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That would be near the time of the award Q for the Nobel Prize?

The University of Pennsylvania was the A That may have been before the Nobel first one. Prize. I don't remember about Rutgers. That may bave been after.

Certainly Gustavus Adolphus was after. g I would be embarrassed if I have forgotten that one. There may be more than those three.

What do you pinpoint as the time when it became know, publicly known, of your interest in eugenics or dysgenics or anti-dysgenics, as you have referred to it?

Well, the first time when this became quite clear and evident is when I gave a contributing paper at the 1967 meeting of the National Academy of Sciences in Durham, Duke University.

I'm pretty sure that was 1967 -- I'm sorry, let me back up. That was 1966, I believe.

I believe I can verify that because in the things I sent you, you know, is the article Written by Harold M. Schmeck of the New York Times. This was Mr. Schmeck who, at the time, was the science reporter at the meeting and this was the

he chose to write about. That caused me to be item he chose to write about. That caused me to be invited to the Commonwealth Club in San Francisco.

that, in turn, led to a vigorous exchange of letters that, in turn, top science writer, David Pro, and between their top science writer, David Pro, and myself.

Q Can you date the Commonwealth Club

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A That would be in 1966 or '67. I have got to back off on this a little bit. I missed something.

Actually, the first thing was an invitation to give the after dinner lecture at Gustavus Adolphus College. This was five years or so after the honorary degree. It was an after dinner lecture on the occasion of the first of the then ongoing series of conferences called the Nobel Conference at the Gustavus Adolphus College.

That was called genetics of the future of man. It was suggested I might talk about population control of eugenics.

Q How did that invitation come about as far as talking on that subject?

A I can trace that back, too. That goes back to the Gustavus Adolphus degree.

On that occasion, it was about the

third largest collection of Nobel laureates that ever The biggest one was, I think, at Kennedy's occurred. affair in about 1961.

Did you attend that? Q

Yes. A

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That's when President Kennedy made his Q famous remark about "This is the largest collection of talent ever assembled since Thomas Jefferson died"?

Yes. If you have done your research adequately, you will also know I responded to that. Kennedy was very informal on this thing and it was a very hospitably run meeting, but I felt somebody should speak up for the scientists and I indicated the great credit that had been done to two sciences and Kennedy was carrying out wonderful things and some press people ran that.

After this, a Bell Laboratory scientist gave -- Bell Laboratory scientists gave a public relations plug for the Bell System, which was very distressing. It's now got a twist, but it was much better than that.

To go back to Gustavus Adolphus and this large group of Nobel laureates there, a reporter now With the Washington Post, I believe, Victor Cohn,

c-o-h-n, went around asking a number of us, "Do you think there will be a nuclear war."

At that time, I said I was not enough of a political scientist to make any estimate whether there would be a nuclear war or not, but one thing that might be an unforeseen benefit of such a thing is that it would focus on the genetic problems that the human race might have.

I had, before that time, become concerned about the excessive reproduction of the bottom end of the population of this country.

Q This was --

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A I put this worry into words. I said that people would have to look at the genetic damage that was done and this would mean facing up to problems that would otherwise be neglected.

I think the fact I expressed this concern led to my invitation to the conference of which I already spoke on population control of eugenics.

Q That would have been what year?

A That would have been 1965, I believe.

That led to one of the items which I think you have,

which is this one (indicating).

It says Nobel Conference, 1965, Genetics

We might introduce that or identify that gince we have talked about it a bit.

(Whereupon, the court reporter marked Defendants' Exhibit No. 368 for identification.)

MR. ADAMSON: I don't see the specific date on here.

THE WITNESS: The specific date was January, I'm pretty sure, very early in the year.

MR. BAILEY: Let the record show that the pamphlet which Dr. Shockley just referred to, Genetics and the Future of Man, has been marked Defendants' Exhibit 368.

Q (Ey Mr. Adamson) What was the next major event in public identification?

A The next major event followed news that originated at -- when I arrived at Gustavus Adolphus College to give this paper, arrived in Minneapolis-St. Paul -- is that right?

Q Right.

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A I met at a press conference from which, as I recall, United Press carried a story which said,

prior to the conference, a Stanford scientist said he reported falsely -- the Stanford scientist said he favored abortion and sterilization of the mentally retarded to prevent the population explosion. That is the phrasing I remember.

I'm not sure I can find that clipping. This produced a flood of letters.

Q What was false about that?

A I had said these are things to worry about, but I was not associating the population explosion with the high rate of reproduction of the mentally retarded. I was concerned more with the quality of life they might lead and so on.

Q Did you protest or write a letter to

A At that time, I did not. I responded to the letters that had come in.

Q You did not sue UPI for it?

A I did not sue UPI. That was early in my experience with the press.

Q Okay.

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A This preceded my experience with the San Francisco Chronicle to which I made strenuous letters of writing. These events were in 1965.

What happened after 1965? That same

year, 1965, I remember U. S. News and World Report wrote on me.

That was published in -- first of all, can you identify that as the article of which you speak (indicating)?

A Yes. 22/November/1965, U. S. News and World Report.

Q What we have handed you is Defendants' Exhibit 1, which we have had marked. Would you describe that interview?

A How the interview took place?

Q Yes.

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I've forgotten and one who is George Jones, and three deputy editors, I believe, flew to Boston where I was attending or participating in a conference on brain structure which I had been invited to.

I was very careful and the interview took place after they had signed a piece of paper which I checked with legal counsel on that nothing would be released from this interview without my written permission of the complete context. They lived up to that, signed this.

They understood this to be the position the U.S. News and World Report. Since they were

officers What you are saying by that is after they condensed that interview into its printed form, they gave you an opportunity to review it before it was published?

That's correct, and I revised it.

You made certain revisions? Q

These revisions had the That's correct. benefit of the man who was then editor of the Stanford M.D. I don't remember his name. I think it was Hallman.

When you said had the benefit of, what Q do you mean?

Of his suggestions. It improved the quality of it in a number of places.

He worked with you? Q

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He worked with me on this. He had received a manuscript of this from the Stanford News Service. He wanted to reprint it. He did reprint it, so it was issued in the U. S. News and World Report, reprinted in the Stanford M.D., the alumni magazine of Stanford.

My subsequent experience with that had a great deal to do with my determination to continue or to pursue these matters vigorously. You have in

your files the response of the faculty of the pepartment of Genetics at Stanford.

How would you characterize it?

As extremely eloquent and it had homonym spproaches with very vigorous expressions, well chosen words to condemn my position and things I would regard as being professional incompetent.

I will show you what will be labeled Q Defendants' Exhibit 2. Is that the response?

> Yes. A

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Is that the letter? Q

This was something I would judge from the date stamped at the top is where we didn't have material -- I'm sorry, our multilith file was so low where this was Xeroxed in two sheets rather than one and I only have Page 1.

Let's talk for a second about that, just Q as a housekeeping matter. Why don't we first take a break.

(Whereupon, a recess was taken.)

(By Mr. Adamson) When we ceased a Q moment ago, we were talking about the second page of the publication.

A Are we continuing now?

Q If you are ready.

Fine. A

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We were talking about the second page of s publication, the Stanford M.D. I show you Q pefendants' Exhibit 3, which I take to be the second page --

Yes, that's right.

That has been marked Defendants' Exhibit Q with that identification and we have already got your characterization of it, what was the next major public event?

After that, that gets us somewhere into .- the one that occurs to me as being next, without p having looked at a calendar, was a meeting at the -the next thing, I think, is when I first gave a talk at the National Academy of Sciences.

This was the time when I became interested in blood type analysis of fractions of white ancestry in American black populations.

Q Was that the subject of your talk at that National Academy of Sciences meeting?

It was part of it. It was one aspect of the talk, yes.

Was that requesting the National Academy to undertake a study of this general area?

A I think I made that proposal at that

I would have to refresh my memory on that talk. manuscript.

- That would be what year, approximately? Q
- I think that was 1966.
- Is a copy of that manuscript among the Q paterials that we have here?
- The manuscript was never published, so it's not a part of the materials.
 - Do you have a copy of that manuscript? Q
 - Not with me, but --A
 - But it does exist? Q
 - A Yes.

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Tell me what exactly the National Q Academy of Sciences is? Is it something you join?

A No. The National Academy of Sciences was set up by Abraham Lincoln to furnish scientific advice in conducting the Civil War. It's a quasi Governement agency.

19 It has some sort of a national status. I don't think the Academy itself gets funds from the Government, but it organizes another organization called the National Research Council which the Academy will appoint the director or head of the National Research Council, and somehow the National Research Council can undertake studies and research

of other activies funded by the United States

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The members are elected by the existing lt's supposed to elect those that are members. It's supposed to elect those that are outstanding in the various fields of its activities. These originally included physics, chemistry, mathematics and engineering.

It has widened out in the last 10 years into such a vast array of different disciplines that I have not kept track of them all. The members of the National Academy in principle, have an obligation to the United States Government to render service to the Government in case anything should come up that would lie in their field, and the National Academy of Sciences was very active in both World War I and World War II in setting up the organization because here are people that can get them together.

Sciences is perhaps the highest generally available distinction that a person, a scientist, can get. As the membership has grown bigger and more fields are in it, the distinction is not so great.

National Academy of Sciences meant that one would automatically be listed in Who's Who In America. I'm

who elects the members to the National

Academy?

A Yes.

Q As a body?

A As a body.

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Q You have not been elected as a member: is that correct?

A I was elected as a member in 1951.

Q That would be among the groups and organizations that --

A Yes. 1951 is an example of an honor that I received.

Q By being elected to the Academy?

A Yes, between the time of the announcement of the transistor in 1948 and winning the Nobel Prize in 1956.

Q Is it an organization that one pays dues to?

A \$10 a year. The proceedings of the $^{\rm National}$ Academy of Sciences has grown thicker and $^{\rm thicker}$ and is split into one involving the $^{\rm biological}$ sciences and one involving the physical $^{\rm sciences}$.

Are you a member of one or the other?

I'm a member of the engineering section. It was a member of the engineering section that proposed I include my name. One can shift from one section of the Academy to another. I have never shifted.

You are still a member of the engineering section?

Yes.

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That's the kind of organization, Dr. Q Shockley, that I would like to know if you have membership in generally. If there are others like that, I would like to know. I ask you, again, are Is there any other organizations?

I was thinking of non-Government ones. I have been a member of organizations and on Government consulting committees on a large number of occasions in various areas.

The Army Scientic Advisory Panel is one and the Air Force Scientic Advisory Board is another. I have been a member of -- these are organizations, but not, so to speak, public ones or political ones.

The National Academy of Sciences is what Q you made an address to in 1966. If I can fairly state what you said, it was that you did, in fact, Propose that the National Academy undertake research

in this area of genetics?

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Well, in particular, although I did not the phrase, it focused on the black IQ deficit and hereditary factors and to try to separate out the environmental from hereditary effects.

Q What happened as a result of that speech?

A I'm not sure that that speech initiated a program in the Academy or not to set up a committee to do a review of this subject, but some of the speeches I gave and motions I proposed at Academy meetings certainly did that. I would have to review the details to check on this.

You want to go on to say what would be the next major public impact type of thing?

Q That's exactly right, sir.

A Well, between that paper and -- that was in the fall of 1966. The Academy meetings come in the fall and the spring.

Q There was a good deal of publicity about the National Academy meeting in 1966?

As I say, it's the story that the New York Times, I believe, played up as being the most important one or the one they chose to report on.

The one in Durham?

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In Durham, yes. I must say that that one of my really plus -- along with Dick Cohn, another one of the really plus experiences I had with the press where my position was very accurately put.

The following spring, in 1967, I gave another paper on which I did some research on some things that hadn't been picked up which I think were important contributions to evaluating qualities of population, different segments of the population. In 1968, I was invited to speak at the, I think it was, 25th anniversary of the founding of a scientific research society at the Polytechnic Institute of Brooklyn. The society is called Sigma Si. It's supposed to recognize either research done or clearly defined research potential. I think the student members are elected in maybe some junior capacity and it goes to something more senior later on, but I accepted at the meeting of this convocation to speak on the topic that I talked about a number of times later on for which I generally, at least a number of times, used the title of Human Quality Problems and Research Taboos.

About a week before this conference

came off, one of my hosts suggested that maybe I might talk about physics because somebody was going t^{0} talk about chemistry in the same time of day that I would talk. I said I had accepted because I felt this was the important thing to talk about and didn't propose to change it.

About two days, one or two days before the meeting came up - and this was a once in 25 years activity so people had been invited to attend from a pretty wide range all over the country - something 11 like 25 telegrams went out canceling the meeting.

This produced a good deal of questioning by the press and the reason was clearly that they were afraid of what might happen because my paper was being given there.

- Did they specifically state in those Q telegrams that that was the reason?
 - A I don't recall that they did.
 - Were you told that? Q

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I don't remember exactly how I came to that conclusion. I know there were various pieces of evidence, somebody pointing out the proximity of schools in the neighborhood of the place where the meeting was to be held who would be disturbed and who might very well cause disruptions and maybe damage,

injuries. Was there publicity about this? Q Yes, there was. 2 A What did those stories suggest? Q I think they suggested the same things that I'm saying. Which is, the meeting was canceled Q because you were going to speak? I think so. I think there is something in the collection of documents that I sent you about it. I don't know whether you ran into those or not, but -- I don't remember exactly which numbers they were, but I can find them, if you would like. I'm going to talk about the documents 14 Q later and we can fill in the blanks. What I'm trying to do is get us to cover somewhat quickly, but as specifically as possible, the major public events so 17 we will have, again, in the same way the rest of your 18 life, a time line of the major events which we're going to be doing a lot of filling in as we go, but at least we have points of reference to talk about. 22 That's the next point of reference, I

suppose, is the cancellation of that meeting?

A Yes.

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Shall we go to the next one? Q

The next one I think of is when the A Harvard Law School Forum invited me to speak. As I recall that, it first started that way but, maybe recall that, it first started that way but, maybe after another phone call, it was proposed this be a debate with Roy Innis, director of CORE or head of CORE, whatever the position is, one of the nation's more prominent black leaders.

- Q CORE is what?
- A Conference on Racial Equality.
- Q Okay.

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A I understood that actually Innis had been invited to speak and that he had suggested this would be an opportunity to debate me and that is why my invitation came. That was canceled.

Q Did we date that time?

A No, I cannot date that that easily. It was in the 1968 range, '68 or '69.

Q How were you notified it was canceled?

A I think it may be that the man I talked to called me up, the man who represented the Harvard L_{aw} School Forum.

Q I do recall articles you submitted about that event. How did that become public?

A I don't think I contributed to making that known. I don't remember.

It did, in fact, become somewhat a

public event?

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I think it had become public on the A Probably the sequence was that this was then campus. Probably the students violently opposed this on the campus and that became newsworthy right then.

I probably heard about the cancellation $_{\text{after}} \ \, \text{the news at Hartford had gone on.}$

Q When you say "violently," was there violence that took place?

A That's using the word rather freely, but vigorously opposed probably would be better. I'm not aware there was any violence associated with it. I don't know whether they sprayed paint on the walls or not.

Q That did not take place, though?

A That's right.

Q Did you ever have any communication with Mr. Innis about this?

A Yes. Innis got in touch with me later

on. I don't think we had any contact to begin with.

that if this could be set up at Yale, would I do it with him. I said I would. I think it was Yale University.

Then there were several interreactions in there and he then thought he had one arranged at I visited Bell Labs at the time and I was princeton. sctually getting into the car or either walking through the front door of the hotel to get into the car to go to Princeton when somebody told me there had been a telephone call. It was Mr. Innis and he decided to cancel out of Princeton because they would not permit television cameras in where the debate was 10 going to be.

At this time, he asked me if I would -if this one didn't work out, if I would be able to appear with him at Yale. I had thought this was not -- at this late date, I didn't think -- well, canceling out of Princeton did not seem to be too appropriate.

I had said I was going to be down in Princeton, anyway, because I had made a commitment to do this. Maybe I said I hoped he would be there, but he was not.

- But you did go? Q
- I went, yes. A

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- Did you speak? Q
- They produced Ashley Montague, the Yes. anthropologist, to be an opponent.

Who is that?

He is a well-known name in the field of anthropology and a popular writer and popular lecturer. I don't remember his university. He is a little older than I am.

Q The two of you did engage in a debate?

A Right.

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Q Was he a worthy adversary?

A I think Ashley Montague is far more effective in reaching audiences than I am. He would make a far more favorable impression.

He is more skilled in that than I am.

met with him a number of times and he has some

excellent standard lines which draws the audience

together. These are sound lecturing devices. I

don't keep those things in my repertoire, however.

 $\ensuremath{\mathsf{Q}}$ You said you have debated him several times and that was the first time?

A That was the first time, yes. We did it once for TEMS Television, I believe, in London. We had a brief appearance -- maybe it was immediately after Princeton, but some brief appearance when we appeared together on one of the New York TV stations.

Back at Princeton and Mr. Innis backing

out. Mr. Montague coming in, what is the next major event?

Well, the next one was -- maybe not the next, but a subsequent one was at Yale University and I think Innis tried to set this up but, in the end, it turned out to be a different arrangement.

It involved the YAF, Young Americans for Freedom, I believe. I think Bill Buckley's name is ssociated with that organization. This involved a very formidable opponent.

> Can we date this? Q

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A I cannot date it.

Roughly, sir? Would it be 1969, 1970? Q

Somewhere about then. These date are A all available and can be looked up very easily.

Q We will fill them in but, again, as you see what we're doing, first, I'm trying, for reference purposes later on, to scale out some of the major events.

I guess I had better get them right While we're at it, then. Here is Dartmouth. I believe that was 1969. That was an impressive one.

You have not mentioned Dartmouth. Q

No, we have not mentioned that. A

That was after Yale, Princeton and Q

I take it?

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Harvard, I don't remember for sure what the sequence was on that. At any rate, Dartmouth is still in December of -- no, must have been October of 1979.

1969, you mean? Q

Yes, I'm sorry, 1969. Here is a Sigma A Chi controversy, which is May of 1968. Dartmouth was 1969, so Dartmouth was apparently earlier than the Yale thing, Yale and Princeton.

I wonder if I can tie anything in there that would give me a clue to the dates of the Princeton affair. I remember it took place about Thanksgiving of whatever year it was.

Was the Yale affair when you were in a debate with William Rusher?

That is right. A

Do you have that one there? It looks Q like 1974?

Do you have one there in 1974 on the Rusher deal?

I'm not sure that's a contemporary Q article or an article that came later.

I think it would be probably at the same A time.

This is in Sepia Magazine, July of

1974?

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(Whereupon, a discussion ensued off the record.)

Q (By Mr. Adamson) I may not be moving in the most efficient way for us. I had hoped to just cut across the high points from your memory.

A I wouldn't want to give you the impression that I come out lightly with dates that I don't have firmly in mind when I can ascertain them. That gives the impression that I may not be too responsible about statements.

Q I don't want to put you in that position. We could do this another way and it may be more efficient.

A It might be more efficient to just go through these (indicating). Then you have two things at once.

I intend to do that at some point. I had hoped to cover the high points of your public debates on this whole issue, this range of issues, more quickly. I would like to do a few other things before we get into the article because that is going to take some time.

Can you remember when you first advanced

what you have termed the thinking exercise of the voluntary sterilization bonus plan?

A No, I cannot.

Q Okay.

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A I know there is a clipping on that in here and somehow Sacramento was involved in it. I don't remember why. I cannot fix that date within three years at the moment.

Q I would like to get your definition of something that is apparently fairly important to you of what you mean by a thinking exercise.

A The voluntary sterilization bonus plan, and I think I said this earlier today, was devised as an answer to the criticism that would be brought up that anything you tried to devise that had to do with human quality would have to follow what Hitler did in Nazi Germany. This thinking exercise involves no compulsion, no physical force being applied.

There have been some other similar plans and, actually, the voluntary sterilization bonus plan was concocted by W. E. Menkin many years before I thought about it.

Now, I want to talk about the sterilization plan and I want to talk about everything that occurred in Nazi Germany and

everything you are talking about, but I'm interested everything in what you mean by a thinking exercise as right now in what you mean by a thinking exercise as opposed to a proposition, I think you said it was opposed to a proposition.

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The reason I call it a thinking exercise that it is something which enables one to think in the same where one might otherwise be blocked particularly by the Nazi history, so the thinking exercise aspect of it might certainly not be emphasized as much as I emphasize it, not quite the same way, if it were not to show its distinction from the Nazi situation.

There are things in science which are called the German Gedanke experiments where you imagine something being done.

Einstein's E equals MC square relationship is accomplished by a thinking exercise.

Q Einstein's relativity concepts did, in fact, become implemented in some form or fashion as we all know. I take it when you're talking about a thinking exercise, you do not include the possibility that it might actually come into some form of implementation?

Well, the voluntary sterilization bonus plan, as I proposed as a thinking exercise, has in

it certain features which certainly would not be it certain features which certainly would not be implemented the way I will now present it.

It needs revisions, but this finding of where it needs revision is part of the thinking where unless that is done, a person is not ready exercise. Unless that is done, a person is not ready to think about implementing it.

Q You, at least, began to debate on the proposition that this is a plan you would like to see come into action or a form of plan --

A trial experiment, yes. When one gets to the stage of doing it as a trial experiment, then what is going to go on should require the most incisive legal review.

Q So, is there a distinction, really, in your mind, between a thinking exercise and a proposition?

A Yes.

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Q A plan?

A Yes, there is.

Q And perhaps you can enlighten me on the distinction.

Well, some thinking exercises might have very drastic proposals in them which one would feel should never be tried out, never be put into action but, nevertheless, by thinking about how these very

sdverse things would occur, one might be enlightened to try to find out ways of avoiding the pitfalls or the difficulties which were present and then, after that, something which would be an actual proposal for sction might develop.

In the article we discussed earlier dated August 9th, 1981, which we will identify as pefendants' Exhibit 369, we talked about it in terms of the letter which accompanied the Leader's Magazine article. Let's go shead and have this marked.

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(Whereupon, the court reporter marked Defendants' Exhibit No. 369 for identification.)

Q (By Mr. Adamson) In this, the writer wrote, "During one of our interviews, Shockley dropped a bombshell by suggesting for the first time they would now like to test the plan.

"He is presently looking for potential candidates through social workers and lawyers."

"If this happens," says Shockley of implementing the sterilization plan, "there will be hell to pay in all kinds of fuss and commotion.

There may be better ways of drawing public attention and responsible thinking to the dysgenic threats, but some stirring up might actually do a lot of good."

Is what you are quoting there as saying

accurate?

There is not a search going on for No. people, as stated there.

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Is it otherwise accurate? Q

Let me look at it again. A

MR. BAILEY: Let the record reflect the witness has now been handed Defendant's Exhibit 369.

THE WITNESS: I was looking for something which I know was in the interview and I thought was in the article, but I don't spot it now.

MR. BAILEY: While Dr. Shockley is looking, there are lot of extraneous matters in the publication that we have marked. We have marked the entire publication as an exhibit and we'll hold it for eventual use as such.

May we substitute with the deposition simply a copy of the cover of the issue, plus those portions of it that contain the interview with Dr. Shockley?

MR. COWART: As far as I'm concerned, yes.

Q (By Mr. Adamson) Now, let's confine ourselves to simply what is in quotes.

That quote is not exactly right. I remember pay. That later and I know exactly -- "hell to reviewing that later and I know exactly -- "hell to reviewing all kinds of fuss and commotion," that is not pay in all kinds of fuss and commotion, that is not quite precise. I think I might have said that there will be hell to pay and maybe there will be all kinds of fuss and commotion.

Q What I'm trying to understand is the difference between a thinking exercise and implementing it. You have drawn a good deal of distinction in the articles we have read and it's not something I understand, frankly.

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A In this case, it's getting beyond the thinking exercise and, as you said, it might be getting into the stage now of something that might be a thinking exercise in terms of a potential national program. I'm not proposing a national program here.

Q When you advised President Reagan he ought to consider this, were you asking him to think with you or were you advising him that he ought to consider it?

What I did in this case was not to review quite carefully enough the text which Mr.

Bunting read to me on the phone on this, but I did
not say -- it does not say they should try a
not say sterilization bonus program. It reads.
woluntary sterilization beaternal done like a
woluntary sterilization bonus plan."

This would imply the same effect. It

follows the sentence which says, "You can talk about
education and the distribution of contraceptives and
so on, but the people you want to reach are the ones
that cannot be educated in these matters. There must
be something external done like the voluntary
sterilization bonus plan, but if something else could
be devised, that might be. I'm not sure what it
could be, but this could very well be better."

I would regard this paragraph as being a form of thinking exercise. I don't know where the --

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Nowledge of the various forms of eugenics that were, in fact, practiced or experimented with or proposed as propositions or thinking exercises or whatever during the time of the Third Reich?

A No. My knowledge of that is more specifically tied into the content of Dr. Masland's letter which you have.

I show you a letter dated January 28,

1968, addressed to you from Dr. Richard Masland, which we shall identify as Defendants' Exhibit

(Whereupon, the court reporter marked Defendants' Exhibit No. 370 for identification.)

Q (By Mr. Adamson) Is this the letter you're referring to?

A Yes.

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Q All you know about what was done in the Third Reich is contained in this letter?

A Not all I know, but most of what I know about the eugenics aspects, the position I was taking in the interviews for the Atlanta Constitution with tespect to the eugenics aspects in Nazi Germany, was testricted to the contents of that paragraph.

Q We're going to talk about the article, but I want to know what you know. I ask, again, is what you know about what was done or not done during the Third Reich contained in this letter?

Well, I will mention one other thing
which I have read about and assume is correct with
tegard to these activities and that involves the
death camps for the Jews. This was in William
Schirer's book of Inside The Third Reich in which it

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Q We're going to talk about the article, but I want to know what you know. I ask, again, is what you know about what was done or not done during the Third Reich contained in this letter?

Well, I will mention one other thing which I have read about and assume is correct with regard to these activities and that involves the death camps for the Jews. This was in William Schirer's book of Inside The Third Reich in which it

described how Jews were executed -- maybe execution is a more formal thing than this was, but were killed while being transported in vans Jews were killed while being transported in vans while presumably taking them from one death camp to another, but these were actually gas chambers.

particular aspect of the Nazi program was the degree to which some humanitarian considerations came into the procedures which went on there. The vans were set up so that the exhaust fumes, I believe, could be fed into the inside of the vans where the people were and if these were fed in at an appropriate rate, they would put everybody to sleep and then, in due course, they would die.

If not put in at the appropriate rate, it would warn the people. They would become sick and one would find, upon opening the van, contorted faces and agonized positions. The people, the Germans, who observed this, were distressed by this.

They felt this was unnecessary cruelty, as I recall Mr. Schierer describing this; therefore, precautions were taken to make sure that these deaths would be as free of agony as possible.

In a situation in which the horrors are extensively documented, as in the case of the

Holocaust, things that were so unforgivable and so detestable, here was this slightly contradictory sort of concern for the feeling of the victims in their last moments of life. This led me to the view that there may have been faint humanitarian aspects to the Germans' extermination plans, or the final solution to the Jewish question, very faint humanitarian aspects which you might not have expected were there at all, so this is an item relevant to my thinking about the Nazi programs.

Something else I remember from the early days of knowing about the Nazi programs was the descriptions of the storm troopers, whoever they were, sending Jews out to clean streets and giving them cleaning materials which were heavily loaded with acid which would burn them, so these are a couple of items.

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I remember reading some things back in the late 30's in the German papers about the inferior tace aspects of the Jews and so on. Those are a couple of aspects of the Nazi program which - where is Masland's letter - which Masland boils down into the rather compact phrase, "whatever the ethics of that undertaking." He then goes on to say, "it certainly represented a vast and, I am sure,

systematic experiment in racial improvement through elimination of the unfit."

Masland has not enlarged or used words to describe his condemnation of the morality of that program, but to me he is making it perfectly clear that he is pushing those aside to say, you know, let that not prevent us from finding out what might be of value to humanity.

Q Have you described everything that you know about what was done in respect to --

A I have described everything that occurs to me now. I am not consciously concealing anything.

Q Do you know of any specific experiments, practices, policies, that occurred during the Third Reich with respect to eugenics or experimentations of this kind?

A I have heard somewhere that one of the other genecital activities was to try to eliminte gypsies in Germany. I don't know where I read that or heard that, but that would be another item.

What specific disagreements do you have with anything that you know about that you have described that occurred during the Third Reich?

A Well, I think I disagree with everything

I said and everything I described. I think this is This is summarized in the interview as detestable. being horrors and I would use that word again.

What were the horrors?

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For heaven's sakes, gathering up people, Q taking them off, effectively starving them to death, this kind of thing. The other thing that goes with it is the stories of making lampshades out of children's skin and so on. These were all detestable things, to my way of thinking.

So, how would you distinguish, then, the basic concepts of some sort of systematic effect on the unfit from a practice in Nazi Germany and the Third Reich which you disagree with and describe as horrors, the concept between the two?

The key concept I bring to bear upon this is the second postulate that I put in the letter to the Presbyterian Life called Three Moral Postulates, Truth, Concern and Death.

The concern postulate says the basis for humane civilization is concern for the memories of emotions stored in the neurological systems of earth's hereditary systems.

There is a faint trace of that in this humanitarian business of the people we execute in the vans should not have to suffer during the last final moments.

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In connection with this, in abortion, I have also proposed in one of the documents that you have that one should seriously consider the giving of snesthesia, anesthetics, to a fetus whose neurological system has significantly developed.

This is an area in which I make so easily a separation between anything that is proposed in the voluntary sterilization bonus plan and what went on in Nazi Germany.

Q What do you know about what went on, as you described it, which is the massive systematic attempt to eliminate a segment of society?

A I think, in some cases, it was probably satisfaction in subjecting these individuals to agony.

Q I take it from what you said before that you would disagree with the sampling as well that was used in the Third Reich?

A Well, the anti-Semitic thing was concentrating, as I said during the interview, upon probably the intellectually most advanced segment of that population.

I published, in various places, the

fact that the American Jews in science are outperforming the white population on a per capita basis and winning Nobels by a factor of 10.

Despite the fact there was an absence of concern, which is the second postulate, the premise in terms of trying to eliminate the most unfit simply in terms not being met because the target group of the was not being met because the target group of the Jewish population was among the most advanced?

That, I think, as I say, was a mistake. I didn't say a horrible mistake. Given the chance to say it again, I would say that this is a mistake in any aspect and a mistake is too mild a word.

Q Do you agree with this statement: "It is not only the decline in birth that has given rise to these measures, but equally the ever increasing to these measures, but equally the ever increasing to these measures and disadvantaged people in the segment of hereditarily disadvantaged people in the makeup of our society.

"Healthy families, for the most part, having only one or no children, are being overcome; the genetically disadvantaged have propagated the genetically disadvantaged have propagated unrestrained, their sick and asocial offspring being

"While the healthy German family,
"While the healthy German family,
especially those well educated, have an average of
only two children, the genetically disadvantaged

produce three to four children per marriage.

"Such a ratio changes the constitution of a society from generation to generation, so that in only three generations, the valuable social strata been completely choked by the disadvantaged. This means the extinction of quality families.

"In addition, asocials require yearly expenditures of millions of Reichmarks in health care costs; footed through taxes of all sorts paid by the healthy families.

"These welfare costs are at a point that they no longer bear any relation to the hopelessness of the situation and must be defrayed by these means.

"For decades, Germany's scientists and others have raised their voices in warning us of this problem and have proven that continued scarcity of quality people must result in the degeneration of society as a whole.

"Today, from many circles, the German people demand a law for the prevention of hereditary disadvantaged offspring from biologically inferior stock

"Because sterilization is the only certain method of preventing the propagation of these people, it must be performed as an act of charity

social welfare for the generations to come.

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"The law is, in actuality, a true social to the afflicted family."

How do you respond to that?

A lot of that would seem to be in spreement with views that I have and that I think any responsible humanitarian would have. If one boils it down, there may be some phrases in there I do not picture or do not register, but otherwise I would say that this objective of making sure that the civilization does not set up a situation in which the quality of the population goes down is a noble thing and, indeed, an objective that should be followed.

MR. COWART: Can we identify what report that is or can you state for the record what you read from?

MR. ADAMSON: Yes, we can. It's a section explaining the purpose of a newly enacted law in 1933 from the records of the Kabinetts of Hitler. It's Die Gesetzgeburg des Kabinetts Hitler and --

MR. COWART: I lost my place. Just give us a copy, will you?

MR. ADAMSON: It will be in the record. It's Volume III, Heft 3, s. 637,

638 (1933). It was the Reichcabinett that passed that law.

MR. COWART: Will that paper be in the record?

MR. ADAMSON: The citation will be. It's only a typewritten paper, not the actual Xerox of the paper.

MR. COWART: Could I have a copy of it?

MR. ADAMSON: I'll be happy to provide you a copy.

Q (By Mr. Adamson) Have you ever said.

Dr. Shockley, that there are some positive aspects of the Third Reich eugenics program that should be studied for its positive aspects?

reason to not endorse and probably do endorse what Masland said, "Whatever the ethics of that undertaking, it certainly represented a vast and, I am sure, systematic experiment in racial improvement through elimination of the unfit. Although I make reference to this concern in my book on Mental Subnormality, I have not found anyone who has had the temerity or energy to attempt to find out what the result was, and it may no longer be a feasible

undertaking."

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MR. BAILEY: You have been reading from Defendants' Exhibit 370?

THE WITNESS: Yes.

Q (By Mr. Adamson) I'm interested in what you said. Have you said, quite apart from Dr. Masland's statement, that there are positive aspects to the eugenics research experimentation that took place during the Third Reich that should be studied?

A Well, I would say it has positive spects just as having a brick fall off the top of a building and hit you on the head might have positive aspects.

Q What are they? I was asking you what you knew about what was done in Nazi Germany. What are the positive aspects?

A Well, I have said I limited my knowledge to this very largely on what Dr. Masland says. Had there been a program to sterilize any peoples who had a 50 percent chance of carrying the gene for Huntington's Chorea so this would not go on, I would regard that as a very positive aspect.

I show you, now, an article which you supplied to us for the Stanford Daily, Wednesday, the latter of January, 1973, Page 1, which, by your system,

which I would like to talk about at some point, is 1-367.5

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We will label this as an exhibit, but there is a paragraph that says, "Shockley said that there is a paragraph that says, "Shockley said that there is a paragraph that says, "Shockley said that they are 'something that we should that we have can learn from, not something that we should turn our backs on'." He noted, "This subject is so detestable to scientists that they are unwilling to do anything shout it."

Let me identify it as Defendinats'

Exhibit 230. I have shown Dr. Shockley a copy of

Defendants' Exhibit 230. Is that what you said, Dr.

Shockley?

A I think that is one of the cases in which I translated Masland's words into my own to endeavor to convey exactly what Masland is saying.

Q I ask, again, and I don't want to prolong it if the answer cannot be elaborated on, but occasionally things come back to mind or a context is given which helps, but what positive aspects of the eugenics studied or practiced in the Third Reich do you think we should look at?

A I think we should look at those things which Masland has described as a systematic attempt to improve the genetic quality of the race. I

accept his words that there will be evidence which will satisfy that.

You know of no specific examples yourself of things that accomplish that that were done in the Third Reich?

No. I know of no specific ones myself.

I can speculate, but it would be pure speculation.

Would you care to do that? Q

I would rather not.

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But you have made such statements which, Q

whether yours or whether a recharacterization of Dr. Masland's or whatever, which do state some positive things that possibly could be gleaned from what was practiced and studied and done in the Third Reich?

There may have been an attempt to eliminate color-blindness, but I don't know.

What do you mean? 0

Color-blindness, I think, is carried by a recessive gene on the X-chromosome of women.

Do you have any basis for stating that Q there may have been an attempt to eliminate color-blindness?

I'm only speculating on what might have 80ne on from Masland's letter. I see no particular point in trying to speculate beyond that when we

scept his words that there will be evidence which will satisfy that.

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- Q What do you mean?
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- Q Do you have any basis for stating that there may have been an attempt to eliminate color-blindness?

A I'm only speculating on what might have gone on from Masland's letter. I see no particular point in trying to speculate beyond that when we

could find out, presumably, some relevant facts.

I restricted my position very largely to what Dr. Masland has said, which seemed reasonable.

and I have not felt it was necessary to become a deep student of the Nazi program.

Q Do you think it also possible that perhaps parts of the program may be aimed at what we might called the individuals afflicted with hereditary diseases?

A Color-blindness is a hereditary disease.

Q Such as epileptics, Huntington's Chores, hereditary blindness, deafness, hereditary physical and mental retardation; would those be some of the categories that might --

A That would come under the sterilization bonus plan, yes.

Q Yes?

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A Yes, I think they would be.

Q The health law which was passed in 1933 by the Reichcabinett specifically provided for remedial sterilization of such categories that I just read

A Those categories were not read from my Writing on the voluntary sterilization bonus plan,

but the Germans had the word epilepsy in there, did they? Yes. 9

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That has been a debatable thing.

I was just trying to explore a bit and I Q was just trying to understand the basis under which and the belief under which you adopt Dr. Masland's statements and the beliefs by which you, yourself, said in the Stanford Daily article that we just referred to that there may be positive aspects to the eugenics that were practiced in the Third Reich that we should try to learn from.

I think I discussed some of those just now.

If I might ask, to change the subject, Q obviously, and we can look at all of these articles, but stories of interrupted lectures and letters to the editors by yourself and others, that you have created what might fairly be called quite a stir.

How would you characterize, in your own words, your reputation today?

Very mixed among different people.

Why don't you try to characterize some of the various mixes?

I sat yesterday next to a retired

postman on the flight from San Francisco to Atlanta. reviewing a box of material that we had.

I handed him some things to read. He raised questions about racial read these. did they really exist or did they not. differences,

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He also said something very interesting .- well, this isn't too pertinent, I don't guess. The point was that when we were through talking --

This was the retired postman sitting Q next to you?

He allowed as to how he was Yes. entirely in agreement with the things I had said, what my position was. I frequently find that reaction.

There are people who, on the other hand. or some people who find my views completely abhorrent, so there is a good deal of polarization.

Is it fair to say, Dr. Shockley, that prior to your entry into this field, when you were a Nobel laureate honored for having been in the transistor field, that there has been some Bignificant change in reception generally that you are accorded in terms of reputation?

Well, certainly I have -- my name has become better known, better known for my activities this area than in the transistor area, you know, the general public.

I would like to be able to think that there is somewhat more objectivity in society as a whole with respect to these matters than there were before I endeavored to draw attention to these matters.

Some evidence for this might be taken from the few appearances I have made this year in which I think there were announcements that were given and opportunity for reactions to develop in which they were lacking. I have spoken to Rotary and Kiwanis Clubs and spoke in Minneapolis-St. Paul where they had to bring me to the speaker's table through the basement to avoid a crowd at the door.

> When was that? Q

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When was that? I would have to look that date up. It was 1975, I think. One reaction that was very interesting, very encouraging, occurred about two weeks ago when this man called up for Los Angeles and introduced himself as the president of the California Federation of Black Leadership.

He wanted to ask me to speak at a meeting which he was hoping to have in Pasadena in In the course of the conversation, I ^{early} April.

was quite touched when he said, "Maybe we ought to you gore about what you're thinking because I have read somewhere that you have said that you might do such to reduce black misery in the next generation," which I have said in various places.

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I told him I had been touched by that response and that I would -- he also told me he had not cleared this invitation with his Board of pirectors and that I should understand that. I said, "There is no more important group for me to reach than the black intellectuals."

The result was that I flew to Los Angeles and he met me at the airport. We went to his offices where three or four other members of the board of Directors came in and I talked about my theories on the order of two hours, maybe a little longer.

There was not agreement, but I think they understood how one can determine fractions of white encestry because I spent a lot of time on that. There was disagreement with my conclusions, but there was certainly a constructive approach. That is an occasion that had not arisen before.

- Ç What was this man's name?
- A I have given his name before, but since

I would not want to talk about this -- well, if you want to call him up and ask him, I don't suppose there is anything I can do about that. His name is Julius Johnson.

Q Are you going to be invited to speak to this group?

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A No. When I left, the response was, on the whole, maybe not, so to speak, agreeing with what I was saying, but it was not unfriendly. I said I had some reprints of a transistor that I would be glad to reproduce if they wanted them. It turned out they did.

Later on that evening, I had occasion to call him because I left something in his office and he told me he and his directors talked things over and felt I was not the appropriate person to be invited, but he left it that we might get together and explore things in the future.

I did not have that kind of reaction with Roy Innis, for example, or with James Farmer.

In the seven years since you retired in 1975, on the average, how many speeches have you made a year?

A It's hard for me to say. It's not a very large number. Six would be reasonable.

- Probably on the average of six a year? Q Something like that. 1 A 2 Is that a fair representation, do you Q 3 think? Yes, and about half of the ones I accept get canceled. Is that still the case? 0 There have been few enough this year. The last one was the Palo Alto Rotary Club. Which was what? 0 The Rotary Club has apparently a rule that if they're going to have one candidate, they should have them all. You're referring to your senatorial Q candidacy? Α Right, about eight of them. Q They had them all at once? 18 A No, they decided to cancel. 19 Q They canceled? 20 The man that invited me was the program chairman. It then got turned down, so it might not 22 have had a backing at the time, you see. 23 Q When did this take place? 24

About two weeks ago.

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Q

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You say about half of the invitations

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you received were subsequently canceled?
           Yes.
    A
           That's been fairly constant?
     Q
           Over a period of time, yes.
           Over really, I guess, since the 60's?
     Q
            I don't have good figures on that.
Quite a lot of them are canceled.
            That's been fairly constant in your
experience, right?
            Yes.
     A
            Since all this began?
     Q
            Yes.
            The reasons vary or are they the same or
     Q
what?
            Let me think for a moment. I'm trying to
think. Certainly one of the reasons that comes up is
fear of disruption and maybe property damage and so on.
            It's because of the controversy that
surrounds your views and your speeches, I take it?
     A
            That's right.
            It's a fair statement that a large
     Q
number of people disagree with these fears?
            That's right, and feel that they are
feel that they are views that should not be
promulgated.
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reople that heard me at a Rotary Club once, one man that invited me to one, you know, said that several people he talked to said, "Well, we know what shockley says is the truth, but we don't like to hear it."

Q You certainly would not say that is true of all of the people who object to your theories?

A Oh, no. I'm sure many of them are very sincere in feeling that my views are entirely in error.

Q During the time we are talking about, really from the mid-60's on, you have engaged in some of these public acts that we talked about until today and you have had a number of appearances disrupted in one way or another; is that correct?

A That's correct, yes.

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Q How many times, roughly, have you actually begun a speech and had it disrupted and had to cancel it?

A Usually it doesn't get to that stage at the beginning. I may be on the platform, but nothing starts.

It's perhaps somewhat memorable to say a least, in which a lack person on the platform also tried to silence

You have gained some editorial support,

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I would say, that is somewhat significant in looking
the articles for the proposition that you should
at the allowed to speak?

A That's the most common support that I hat they believe in the First Amendment.

You, yourself, have articulated a number of times your belief in the First Amendment and the exchange of ideas, opinions and points of view?

A That's right. I said that the First Amendment phrasing involving freedom of speech and freedom of the press may be a set of words in the value of society compared to perhaps -- I don't know, but Newton's theory that to every reaction there is an equal and opposite reaction.

Q I believe you even quoted Joseph Gerbel's --

A I don't remember quoting Gerbel. I quoted Mr. Spear.

Q Perhaps that is what I read.

A I have only myself to blame.

Q That's one quote I remember. I remember that as being Spear.

A That's correct.

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For that proposition, you're citing experiences from the Third Reich, that had there been experiences from the operation, perhaps the first Amendment in operation, perhaps the strocities referred to would not have happened; is strocities referred to would not have happened; is

A That's a fair statement. I would like to believe that had the German people had a working first Amendment, it would have permitted the uncovering of the concentration camps and the death camps and would have done for them what the Watergate undercover story did for this country. The Germans would not have put up with it.

Q Has there been a particular change in your reputation since you retired in 1975?

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A I wouldn't say so. I'm not aware of it.

Q Would you say that the colleges and universities in which you have had disruptions and cancellations perhaps not have been as true to either the principles of the First Amendment and academic freedom as you had believed in?

A Oh, I think that is true. I think I would agree with that.

Q Do you remember that once you had a speech disrupted here in Georgia, Athens, Georgia?

Yes, I remember that. A

Could you describe that, to the best of Q your memory?

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Well, let's see. Had I been invited there to debate or to speak? I have forgotten which it was .

Later on, I came back and we did a debate -- did I do two things? I think, on the first trip to Georgia, it was disrupted and I did a television interview with someone there.

I think the second time I came, it was relatively quiet. I'm trying to refresh my memory on what went on.

I remember some instances well. the first disruption, immediately afterwards, I was taken to some other building belonging to some debating club or some organization on the campus and CBS had gotten over there with their cameras.

In this first speech, which was set up to go on in some rather modest sized auditorium, I temember that as we came in there, their picket lines Were going around. I went through these picket lines, I think.

That's the only time I have ever been *Pat on, that I can recall, and I was sitting on the platform and the audience didn't get sufficiently
under control to enable me to speak. I think I was
under control to appear.

I don't believe anyone else was to speed with me. Then we were hustled out through some other door than the one I came in through. I went to this other establishment and there was some interviewings, some TV types there to whom I spoke as well. I don't recall anything particularly semorable about it. There were some student paper people there, I believe.

Q Do you recall whether either the Defendant newspaper or the Atlanta Journal-Atlanta Constitution had anything to say editorally about your right to speak?

A I don't know. I don't remember that.

Q Okay.

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A I remember taking an interest in a girl teporter that had written some things up and perhaps telling her about this TV taping that was going to come on in confidence so she could come if she wanted to with the understanding this would not be spread around to stimulate a further disruption.

I'm not positive of that. I have done th_{at} type of thing in a number of cases.

You have been called a lot of thing, Dr. Q shockley: is that correct?

Yes. A

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And in print? 0

Yes.

Do you recall some of the things you Q bave been called? Have you been called a fascist?

Yes, I have been called a fascist at one time or another. I have had a number of cases where there seems to be no logical consistency to that position. It's just straight name calling. I have m been quoted out of context.

Have you been called neo-Nazi?

I don't know that I remember that B particular phrase.

We can go through a number of these articles and pull out all sorts of names, but I think it is a fair statement to say, is it not, that a lot of very harsh -- true or not, and I'm not making a judgment on whether they are true or not, but as to the question as to the existence of name calling in the print, there has been harsh statements about you?

Well, it's simply a matter of name A calling. I felt it fairly obviously was that. I tecall rather clearly one of my first reactions with the press that occurred after I had given a talk at McMasters University in Canada.

I was there to give something called the Red Man's Lecture. I think the situation on that one was that -- it may have been the voluntary sterilization bonus plan or maybe I talked about the Jessee Child Certificate, which is one I borrowed and tried to improve on from Kenneth Boley, but it came out I was slightly advocating it or something of that sort. I got calls from various newspapers.

I remember it was some German newswoman who called me up from -- maybe she was in New York and I was saying this just wasn't what I had said. I said, "What can I do about it?" She said, "Why don't you tell them that they made an error."

It was an Associated Press story. It was one of the first times, perhaps, I felt I should try to deal with the press. I ended up talking to a man I had some contact with later on, Lou Barcardi in New York. I said, "This is a plain incorrect quote."

Q Who is he with?

A He is with Associated Press. He may be now the head of the New York office. Sure enough, they then proceeded to run a correction on this.

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Was it your practice, Dr. Shockley, when you did come across or come into possession or read an article that used words or was covering an event that you were involved in and you found an error or even an opinion to which you disagreed, to write a letter to let that be known?

A I was not systematic about that, no.

Q Did you do it with some frequency?

A Not a very high frequency, no. I depended upon the -- I reacted to the force of the thing, the amount of public it had reached.

Time magazine, for example, did an article that is contained in the exhibits and we'll talk about it in detail tomorrow or later, but you wrote an article in response to that. What provoked you to do that?

A I don't remember. I would have to look at the article.

Q We will talk about it specifically later.

A My position was clearly misrepresented on a matter I tried to be explicit on that occurred in the Master's. I would react to that or I would react strongly to something I felt was leaving the public with a misapprehension as to what might be

what I would regard as important facts that they
should have. That may have been what went on with
should have. Time magazine.

If we were to go through this host of several hundred articles individually and take each one separately, we would probably find a lot of times and a lot of statements characterizing your position or statement about you with which you might disagree:

is that correct?

A I would think so, yes.

Q On occasion, you would, in fact, respond to such an article with a letter to the editor?

A Yes.

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Q Or some sort of response?

A Yes.

Q You frequently would respond internally with notes or comments by retaining those articles or clippings; is that correct?

A I don't understand that question.

Notes or comments to yourself or to your friends or associates to whom you might show --

A There is nothing in the documents that said what you proposed just now goes on, is there? It's an inference you are making?

Many of the documents have personal

notes or comments critiquing the article, stating what you had said or did not say?

A Correct.

Q Where it was wrong or where it was right or where you disagree with the opinion of the person. Is it also fair to say, Dr. Shockley, that you actively pursued and sought public attention of your views and ideas and opinions?

A Yes, I think it would be fair to say that.

Q Is that still the case?

A That is still the case, yes.

MR. ADAMSON: Let's take another five-minute break for our reporter's hands.

(Whereupon, a recess was taken.)

Q (By Mr. Adamson) Dr. Shockley, forgive me for asking, but -- I probably should know, but I do not, I don't think, what do you spend most of your time doing since your retirement each day?

A Well, there is no very fixed pattern to this.

Q No apologies are necessary for sailing.

A Well, the sailing has been a thing of the past for four or five years.

Q Is that correct?

A Yes. A year ago, there was a good deal of time spent in killing the weeds to get my garden into shape for the low maintenance plants that had been put in so we would not have to contend with weeds, so the first six months after the old lawn had been pulled out and other things went in, why, to get this at a low maintenance state, I was spending about seven days a week on it.

Q On your yard?

A Yes.

Q Let's take a typical week other than the six months you were working on your yard. What time of the morning do you get up?

A Well, that is quite variable. If I'm on the computer, why -- I was on that for quite a while doing things and then I might get up at 3:00 or 4:00 o'clock in the morning because the rates go up after 6:00.

Q This is a Stanford computer that you make use of?

A This connects to the main computer at Stanford, yes.

O You lesse time from that computer?

A You don't exactly lease time, but the

way the Stanford computer accounting goes, you get charged so much for every second you use the central processing unit and so much for each minute or hour that you are connected to the computer and these two numbers add up together to tell you your cost for a given session.

On the off hours, there is another arrangement where it cost you \$2 an hour no matter what you do, so you can sometimes do in one hour what, in the daytime, might cost you 50 bucks.

Q So those days you get up early in order to use the computer. Would you describe yourself as what we normally call a morning person or night person or do you subscribe to those generalizations?

A I would not by my activities, no.

Sometimes I run up very late and other times go to bed earlier.

Q How much sleep do you normally get?

A Oh, maybe seven hours. If things are interesting, pressing things going on, it may be down to six and I would sleep less. Sometimes if I'm having a problem with a cold, as I did last weekend, why, there were 10 days I missed about 10 hours in bed.

Q Has that been true most of your life,

1	seven hours normal time and six hours for a shorter
2	time?
3	A At one stage of the computing business,
4	I was taking a nap in the afternoon. I think I had
5	less total hours of sleep a day then.
6	Q Has that changed at all in the last
7	year?
8	A I wouldn't say so, no.
9	Q Do you and your wife socialize a lot?
10	A With other groups of people?
11	Q Yes.
12	A We're not socially very active, no.
13	Q Do you go to dinner parties?
14	A Not very often.
15	Q Do you have dinner parties?
16	A Again, not very often.
17	Q Do you have a regular group of friends
18	with whom you maintain regular contact?
19	A Oh, a very small number.
20	Q When you say "a small number," what do
21	you mean?
22	A Half a dozen, something like that.
23	Q Are these friends that you have known
24	for some time or
25	A Mostly, yes.

217 Has there been any change in that in the Q last year? 1 I wouldn't say so. A Do you travel, you and your wife Q travel? Occasionally. We were in Pittsburgh shout three months ago, I think. Why in Pittsburgh?

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Pittsburgh was longer ago. I take that back. It was more than a year ago.

Three months ago we went to the Kennedy Center in Washington where there is a play being put on called The Physicist, so the promoters of the Kennedy Center said, "Let's get some prominent physicists in."

Q They invited you to attend and you made that trip?

A That's right. They picked up the travel.

Q You were able to visit and stay with your daughter, I take it?

A No. I think we stayed at the University Club in Washington.

Q You were able to see your daughter on that trip, though?

O Dr. Shockley, since the article in question here was published on July 31st, 1980, what has changed about your life?

A Well, I don't have -- I think some of the landscaping occurred about that same time, so that was certainly involved in the situation, some of the gardening activities got underway about that same time or maybe before, but I would say no major changes in my way of life since -- starting in August of 1981.

Q Have there been any particular major changes since you retired in 1975?

A Actually, it starts in December of 1981.

I'm looking through here to see if I see snything that strikes me.

Q What are you looking at?

A A steno pad that I carry around with me that I write notes in. It sometimes says where I have been. I don't have a pocket diary that goes back to that date.

Q Does that cover a period that begins back in the summer of --

A The first notebook entries appear to be the 14th of December, 1981. That is when we were on

our way to the Kennedy Center.

MR. COWART: You said since 1975?

THE WITNESS: I'm sorry.

MR. ADAMSON: I originally asked you before that how your life changed since the article was published July 31st, 1980. I think you answered that it did not.

Then I asked generally was his life about the same as it was back when he retired in 1975. We talked about most of your activities in that regard.

THE WITNESS: Yes.

Q (By Mr. Adamson) It doesn't sound like it has changed much, but I just wanted you to have the chance to respond specifically to it.

A I don't remember any noteworthy changes.

Q Do you know Dr. James Venable?

A I find I have some familiarity in my mind with the name Venable, but I don't place a James Venable. I don't place any specific Venable.

Q Have you ever corresponded with a James $V_{enable?}$

A I don't recall.

Do you know the name Sandra Scar?

Yes, I know that name, Sandra Scar Scalapetti and maybe something else at that time. Who is Sandra Scar? Q She's been involved in the environmental A aspects of this controversey. I appeared with her at least once on a TV program. Dr. Shockley, do you believe in God? Q My position on this has been described A in a certain way in which I say I am somewhere between atheist and agnostic. I read one time, I believe, that you Q carried a press card? Yes. A Q Do you still do that? Yes. A Why do you do that, Dr. Shockley? Q A It's an old keepsake. Q Have you ever used it? A Once. Where did you obtain a press card? Q It was given to me by William Loeb. A Would it identify you as a correspondent Q for the Manchester Union Leader? A Yes, or the equivalent. Do you consider yourself as such, a Q

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correspondent, in the sense of making contributions to that newspaper?

A Well, there was more hope in that than actual performance.

Q I have also read where you have identified yourself as a raciologist?

A I pronounce it raceologist.

O I'll accept your pronounciation.

A I have identified myself in print as that a number of times. The word racist in some dictionaries and in the minds of many people implies an attitude of conviction of superiority for your own race and feelings of hostility and degradation towards other races.

A raceologist is a word that could be appropriate used as someone who tries to make analytic -- reach analytic conclusions about differences between races.

Q Would you accept a fair statement in return that if someone called you a racist, that that would be accurate?

A That would be what?

Q Would that be accurate?

A No, I would refute that. I would say it carries these implications which do not apply to me.

State what those are, again?

A The definition commonly accepted for a racist is a person who believes in the superiority of his own race and views other races as being inferior and tends to be hostile to them.

Q You would reject the notion that you show any hostility to blacks?

A That is correct.

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Q Do you have any black friends, Dr. Shockley?

A No, I don't think I do.

Q How much association in your life have you had with blacks? You have detailed a few, I think.

A In <u>Playboy</u> magazine.

Q You're referring to the author?

A Yes. Syl Jones is a black I had some exchanges with. There was a black at KGE in San Francisco that I had a number of meetings with.

Q Those experiences are all experiences with working newsmen or newswomen, as the case may be?

A No. I have had, let's see -- there was a very effective nurse in the hospital where my wife and I stayed after an accident.

The state of the s	What was your occasion for being there?
*	A She was a very effective nurse and
2	$_{ m Q}$ I mean, what was the nature of your
3	illness?
4	A Dislocated left hip and an injury to the
5	femur.
6	Q You found her an effective nurse?
7	A She was the Director of Nursing in the
8	
9	ward where we were and she handled things very well.
10	There were also some nurses, black nurses, on the
11	ward who were quite as good as the white nurses.
12	Q They were quite as good?
13	A In fact, some were superior on certain
14	matters of cleanliness which involved bedpans.
15	Q You mean taking care of you?
16	A They did a better job of wiping your
17	bottom than the white nurses did.
18	Q I'm sure I will absolutely mispronounce
19	this name, but did you have an occasion to have an
20	experience with a Nigerian black by the name of
21	Oladele
22	
23	A Oladele Ajayi, O-1-a-d-e-1-e, second
24	word A-j-a-y-i.
25	You obviously did. The answer is yes?
	A That is correct.

Q Could you describe that experience?

A It was a rather varied experience. He signed up for a class that I was teaching which I had not very many students in, not more than five, four or five at the most.

I remember the names of the other ones; one was T. J. Rogers and the other one was --

Q These are other students?

A Other students in the same class. There may have been a girl student whose name I do not remember. This class was disrupted. The questions of racial differences were brought up by the people that were in there.

I said some remarks about this and pointed out that there were exceptions, I think, and Mr. Oladele Ajayi was one of the more superior members -- I believe these are just some of the general thoughts that came up, but somehow, subsequent to these disruptions, the relationship with Oladele Ajayi became significantly more strained and on one quiz I gave, he did very badly and, in discussing this with him, he was, as I recall, very resentful of my appraisal which I tried to explain and compare with some difficulties I, myself, had as a graduate student.

 It is my impression he was taken under the wings, $perhaps, \ of \ the \ SDS \ or \ the \ more \ radical \ students \ that$ were involved.

In the end, on the basis of his performance on the quizzes, I suggested that he might be better off to drop the course, that it might not work out too well.

In the end, I think he passed it but it involved my getting another professor in to grade the final examination simply to avoid any implications that might come up with this.

Q He continued on with your course?

A That's what I remember now, yes.

Q I think I read that he is the first black student you had had; is that accurate?

A I think that is correct, yes. I don't recall another one.

Q Have you had others?

A I say, I cannot recall another one.

Q Afterwards?

A Since then -- wait a minute, that is not quite correct. I had a black student in the freshman seminar that I was teaching and he dropped the seminar rather early in its stages.

Q Did he give a reason for that?

I don't remember one. A 1 Do you remember his name? Q 2 No. A 3 I show you an article which was in the Q 4 Washington Post, dated Sunday, March 12th, 1972, that 5 you provided us in our discovery request which, by your system, is labeled I-311, which we are 7 identifying as Defendants' Exhibit 182. 8 Do you recall that article? 9 A Not very clearly. This has to do with 10 -- let me freshen up on it a little bit. 11 It's entitled Intellectual Racism? 12 0 13 A Correct. 14 Q How do you react to that headline, 15 Intellectual Racism? 16 I find it somewhat offensive. 17 Did you in any way respond to the Q 18 Washington Post? 19 I don't remember that I did. I doubt 20 Certainly this was statements of fact, 21 "Classroom has been the target of two disruptions and 22 he has been burned in effigy" --23 She's got to get what you say down, so 24 speak up. 25

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It has things in it which I regard as

probably factual.

I would like for you to read that article and tell me things that are not true.

A Let's see. The first paragraph, "Someone had painted 'sterilize Shockley' on a wall of the Stanford University campus. A slight, white haired man walked up to it, turned around and posed while a friend took photographs."

I don't remember the incident, but it may very well have happened. I don't remember whether I have photographs or someone acquainted with me was taking them for his own purpose.

They're certainly not treasured possessions of mine.

"The man was William Shockley, Nobel laureate for co-inventing the transistor and, of late, increasingly a subject of controversy for his view that blacks are genetically inferior to whites."

In 1972, I was probably stating a view, and my standard phrasing involved inescapable to give an opinion.

"The picture taking incident illuminates the dimension of the man who is stirring up the Stanford campus." Well, I don't know quite what that means by "illuminates the dimensions of the man."

I would say it's not a description that I would regard as being constructively informative.

"Shockley is a tough, abrasive individual of 62 who peddles his unpopular theories with missionary zeal and obviously relishes the controversy they generate."

I don't flee from the controversy, but whether I obviously relish it is rather doubtful.

"He has been pushing those theories since 1965, and has had his share of demonstrations while lecturing on other campuses or at scientific meetings. But Stanford, where he holds a half-time chair in engineering science, he had always been a sanctuary - until recently.

"Since January, Shockley's classroom has been the target of two disruptions; he has been burned in effigy at a rally."

I don't know that for a personal fact. It may have happened.

"Sterilize Shockley," and other antiShockleyisms are the most popular graffiti on campus
and the Stanford Daily is filled with letters,
columns and editorials debating the Shockley issue
hearly every day." I suspect that's an exaggeration.

"Shockley is not alone. Other

individuals who expound the possibility of a genetic basis for racial differences in intelligence have been 'zapped' at a regularly increasing rate, in what seems to be a concerted effort by the radical movement to rally against so-called intellectual racism."

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I believe that last sentence or so is accurate.

"Within the last two weeks, radicals at Berkley invaded the Faculty Club and demanded that Chancellor Bowker fire Arthur Jensen, the psychologist whose theories on genetics and race have made him a national target.

"Demonstrators later disrupted a speech at the University of Iowa by Harvard psychologist Richard Herrnstein, who suggested in an article in the Atlantic" -- this is a hell of a long article.

Q We don't have to go through the whole thing.

A "That there may be racially genetic differences in intelligence," I believe that inaccurate. I don't believe Herrnstein ever did **Buggst that. Do you want me to go on?

Why don't we wait just a minute and let pick out a few.

There is a reference later on to a series of events in which you propose, I think, beyond a mere thinking exercise, to teach a course involving what you have termed dysgenics, I think, or genetics or eugenics or the general subject matter of this idea.

That was rejected on several occasions by some kind of governing body of the University?

A Yes. It had to do with courses and so on. There are two cases, I think.

Q Two instances where that was proposed and rejected?

A Yes.

Q What were the reasons given for not instituting such a course?

A Oh, Lord, there are a whole group of teasons. One of them was that the type of statistics I was teaching could not be taught in that time and I didn't know enough statistics to do these things.

Those arguments I think they backed down from. I believe, on one occasion, at least, the committee that had been set up by, I think it was, Lincoln Moses, the statistician who was maybe dean of graduate studies, his committee voted in favor of letting me teach the course and Moses overruled it.

I did look a day or so ago at some of the comments by Herman Chernoff, a man who was at that time or about that time head of the mathematical statistics department of Stanford, you know, pointing out or opposing the decision that had been made and pointing out such things as the reading list I had proposed could be easily remedied.

He was pinpointing the rather arbitrary actions that had been taken by the committee.

I was in agreement on that view and published some documents which you will find in there that are not thoroughly in mind at the moment, but in which I concurred with that view. It's an arbitrary one.

Q It was apparent, then, that no course that you were proposing on this subject be taught by you was ever accepted at Stanford?

A That is correct.

Q Have you had any formal training in any of the disciplines that are generally associated with genetics --

A I have had some self-training.

Q -- or dysgenics?

A Oh, some self-training in this. This started in 1966 with a paper that we have discussed

that I gave at the Academy and was written up by Harold M. Schmeck. At that time, I looked into the papers having to do with the determination of white ancestry in the American black population by use of blood types.

That maintained an active interest and still does. At the time of these course proposals, I had devised a scheme which, when worked out, did enable one to make an estimate of something which I had previously not been estimating; namely, estimating from blood type measurements in a black population, American black population. I devised a method of making an estimate of the spread or variance of the Caucasian ancestry in that population.

This is a central feature which a population should have in properly designed experiments to evaluate the effect of the fraction of white ancestry upon black performance.

Q What specific research did you base that particular article on?

A I base that on the data published by a Reneticist, T. I. Reed. Beyond that point, I made use of the probalistic mathematics and extended this to reach these new conclusions.

On how many occasions did you attempt to persuade the National Academy of Sciences to undertake studies respecting this?

Must have been on the order of half a dozen, maybe more.

Was that ever done? Q

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My proposals did result more or less A directly in at least two cases of reports coming out which, in some cases, made statements which I believe evaded the issue or did not deal with it constructively.

I would have to look back and refresh my memory somewhat on that, but, in some cases, the votes to take constructive steps on this were nearly positive. They were certainly much less negative than they were to begin with.

But you still are not undertaking any studies directly in response to that? Those have been specifically rejected, have they not, your proposals?

A One of the parliamentary operations is to table things and that amounts to rejection.

Q An age old parliamentary device, to reject. Dr. Shockley, why don't we talk a bit about your complaint having to do with this article.

It would probably be helpful for you to next a copy of the complaint in front of you which ess filed in this lawsuit.

- I have one in this folder. A
- The complaint you filed was filed on Q July 29th; do you have a copy in front of you?
 - Yes. A

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- You assisted in the preparation of this Q s complaint, did you not, Dr. Shockley?
- It was done in collaboration with Yes. N B Mr. Cowart.
 - You have read it? 0
 - Not word for word within the last several months.
 - C You have read it in the past, though?
 - A Yes.
 - Q You had read it prior to its filing?
 - A Yes, I think so.
 - Q Let me refer you to what we have humbered ourselves as Page 6. I doubt yours is numbered. It has (d), (e), (f).
 - A Okay.
 - 0 You write in that, in the complaint, or you state that, "Defendant injected the above in editorializing" --

- A What paragraph is that?
- Q Down in (f), the bottom of the page,

"That Defendant injected the above" - and it's referring to certain statements in the article - "editorializing", and onto the next page. Are you with me?

A Yes.

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Q "And in furtherance of the original intent to label Plaintiff as a racist and anti-Negro."

A That finishes that one.

Q The next one, Paragraph (h), you go on to talk about editorializing in Paragraphs 8, 9 and 10 and say, "Shockley is obsessed with the plan and does not understand why he is vilified and shunned, why he is so unloved, is an invention of the Defendant, is untruth in fact and editorializing to impress the reader of validity."

On the next page, again, in Paragraph (k) you quote from the article and you call that defamatory editorializing. Under Paragraph 9, "As to Defendants such liberty was taken in editorializing that same shows on its face to be with malice" et cetera, and the word is used and I'm just wondering, Dr. Shockley, can you tell me what you mean by

"editorializing"?

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Well, editorializing differs from reporting, as I understand it, by presenting things not as objective facts that could be evaluated by a witness at the time but, instead, interpreting them, describing them in terms of the meaning that the person who is writing would wish to convey.

How do you distinguish that from what you and I might commonly call opinion?

Well, I would distinguish it by saying somebody writing for a journal or reporting and not 12 indicating that it is an opinion, but indicating this is a factual report. Did he write in this -- no. 1'm not quoted as saying, "Blacks are simply less intelligent."

The quotations there mean it was quoted from the article, but it was not double quotes, meaning it was quoted as saying this, and that is certainly one I would regard as editorializing and distorts my position in a derogatory way.

0 You're suggesting that what is going to be an editorial should be labeled an editorial or should be labeled an opinion; is that correct?

Something of that sort seems to be appropriate.

Rather than being on a news page and it is something that appears to the eye as a news article?

Yes, I would agree with that.

Q Would your complaint be the same if this particular article had appeared on the editorial page of the <u>Atlanta Constitution</u> and was stamped above it "Editorial: This writer's opinion"?

A I don't know what my reaction would be in that case had it appeared there. I would have been offended with it in the same way I'm offended with the actual publication and I would have looked into the possibility of various kinds of recourse.

What I would have found about that, I don't know.

Loeb, for whom you are a card carrying correspondent of his newspaper, and I use it in the past tense because I understand he has died in recent times, but isn't it true that he frequently published opinions or editorials on the front page of his newspaper?

A Yes, I think that is true, many issues.

Q Do you know if he always labeled those "This man's opinion" or "Editorial"?

A I think the context of the Manchester

union Leader -- I think Bill Loeb's position and attitude on this have been clearly presently so many times, that anybody that asks anyone about an article, you know, would realize Loeb was expressing his opinions.

Q Why don't we look at the article itself which, of course, is attached to the complaint as an appendix, and it appears at the top of Page 1B of the Atlanta Constitution.

The article has a picture of Roger Witherspoon and underneath the picture is Health and Science Writer.

The headline is Designer Genes By Shockley.

Let's take it line by line and not quibble over whether it is set up as a news article or editorial and let's try to determine in precise terms what it is you believe is false and, as a separate question, defamatory and tends to lessen your existing reputation.

Paragraph one says, "No on doubts the brilliance of William Bradford Shockley who, along with two Bell Laboratories colleagues, invented the transistor in 1954 before they even knew how it could be used. They had the foresight to see the need for

the little device, which has since revolutionized the

A Well, I think the statement, "before they even knew how it could be used" is, in a sense, derogatory. It adds nothing to speak of to the paragraph.

The transistor in 1954 -- it's true that we didn't know specifically how it would be used, but we knew it had wide potential objectives. It seems to be a gratuitous sentence which adds nothing and does have a faint flavor of being demeaning.

If it had been the case that we stumbled upon it as a result of experimentation before we knew such a thing existed, that would be a fair statement, but it's an example of lack of knowledge. When it says, "before they even knew it," that even makes it a little bit stronger.

Q Paragraph two, "He shared a Nobel Prize in 1956 for his part in that discovery, and has spent his time since then soaking up the sun around Stanford University in California and looking for Problems which may or may not have solutions."

- A Shall I react to that?
- Q Yes.

A It seems to be a gratuitous type of

statement which has little to do with what actually 1 I spent my time soaking up the sun? some stage, it became evident one should be careful 2 shout soaking up too much sun at my age since there is a problem of skin cancer. 5

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"Fifteen years ago, Shockley, the Q professional engineer and amateur geneticist, thought he had found a problem no one had had the guts to look at - the reason for the disparity of scores between whites and blacks in standard academic IQ tests."

That's a distortion of my objectives. I ran into things which I thought involved potential vast amounts of human tragedy and I started to explore these things and was shocked by the reactions I encountered.

So far, what we have been doing is Q basically disagreeing with characterizations, I think?

Well, where it says, "and looking for Problems which may or may not have solutions," well. it may be it's a very different statement than looking for conclusive things that might be done for society or for technology.

implies -- nothing in that first

sentence of the second paragraph implies anything in terms of responsibility in applying one's intellectual powers constructively.

Q Paragraph three says, "Blacks, he said. were simply less intelligent."

A That is certainly not my -- it was not that simple a statement.

Q What would you say?

A I would say -- furthermore, I would give a value judgment on this, that this is a tragic situation if true but, furthermore, to say, "were simply less intelligent," that's sort of all there is to it. This is like the one I ran into with Perlman at the Chronicle where he said, "Shockley says there is a gap in blacks' intelligence."

Here I said in the interview that many blacks are superior to many white on any set of standards you choose to express.

Q Would it be accurate to say blacks, on the average, are simply less intelligent?

A The word "simply" implies sort of a completeness of this statement and makes it a simple statement. The statement is really not that simple.

Q "And they inherited this trait. And the disparities in educational opportunity, the

disparities in job opportunity, the orientation of tests and testers, the effects of disparate environments had nothing to do with the fact that blacks scored 15 points or so less than whites on abstract reasoning tests - at least, not in Shockley's world. Blacks were an underclass because they were born to an underclass. Racism had nothing to do with it. Opportunity had nothing to do with it. Great Society and poverty programs could have no effect on it. Period."

A That is false or there are false statements in that. I have published, in one case, and I don't remember whether this came up during the interview or not, but I certainly didn't say anything that would contradict it, that a certain method of teaching I participated in formulating and that was tried in my freshman seminar and also with a group of junior school students, gave indications that the type of teaching I had would influence black attitudes to such a degree and in such a direction that it might well produce something like a 3-point or 5-point, and I don't remember this exactly, increase in IQ. That is in print in one of the items we have covered.

If I may, I would like to adjourn for a

few minutes and return and not take terribly long.

MR. ADAMSON: Fine.

(Whereupon, a recess was taken.)

Q (By Mr. Adamson) Paragraph four --

A We have not finished three. I mentioned that we had one publication in which I said that the method of teaching, and which was published in one newspaper, at least, was what I thought changed the attitudes of blacks toward academic education in a way which might very well eliminate some fraction of this 15-point deficit.

Disparities in educational opportunities, disparities in the environment, it doesn't even mention -- educational opportunity, I would say I'm not sure disparities had anything to do with it, but also some of these environmental effects could very well have an influence.

Q Okay.

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A All these things might have something to do with it and I would not have taken the position they had nothing to do with it. I would have said these things would not, perhaps in my opinion, have had a major effect. I would have said they had a significant effect.

You would have said they would have had

a significant effect?

A They would have had a significant effect, but might not have been major.

Q I don't understand the difference.

A Significant means you can measure it.

Q You mean if it's measurable?

A If it's measurable.

Q Then it's significant?

A There would be a certain error, but if the thing you are measuring is bigger than the error, then you can say it's there. Then you are entitled to say it's significant.

Q If it shows up on the chart, it's significant?

A No. Do you know the difference?

Q No, I do not. That's the reason I prefaced the whole deposition by saying I'm not a physicist or geneticist.

This is a concept in my educational -that is educational research or matters that have
never been very important to know because in the work
I did, we always made the result so well defined that
the result stuck out like a sore thumb. Where the
causes are more numerous, what you have to do is
calculate -- well, suppose you expected a pellet

dropped from the ceiling to land in this column, but it landed in this column. The pellet doesn't always fall in this column. There is some variation to it.

If you can make a calculation of what is the probability that you will find more or a certain number or more than that number in this column and says that probability is less than one chance in 20, the magic number the statisticians use, but you found more than this prediction, you would say that this is a significant effect.

Q I'm asking you to simplify this. I'm going to ask you, on a scale from one to one hundred, how many, in your theories, how many or what percentage of the one to one hundred is attributable to hereditary genetic factors and intelligence?

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environments in typical white populations such as the U.S. white population, in my opinion, is that the thing that makes IQ's different from one individual to another arises at least 80 percent from genetic differences between the individuals and less than 20 percent from environmental differences.

That is among white populations?

A That is within a white population, the U.S. white population.

Q What do you feel the percentages are in the black population?

A I would have no reason to think they're very different within the black population, but this says nothing about the difference between the average of the white population and the average of the black population. That's another matter.

Q Let's go to Paragraph four.

A Okay.

Q "The fact that the National Academy of Sciences and most geneticists disagreed with him did not deter the man. They are wrong, he said, and would one day have to admit it."

A The first sentence I think is valid. The second sentence is valid up to the second comma. I'm not at all sure they would one day have to admit it.

Q Would that not be a legitimate opinion that one might hold?

A I don't think it's one that I would necessarily hold.

It may not be factual, but could be somebody's opinion?

A Well, whether I would say that one day they would have to admit it, I don't know. I would

hope that would be the case, but in regard to these matters, all civilizations have, in due course, declined and one of the reasons they may do so is because people do not or are not willing to admit some of the things I'm talking about.

I don't think I went that far. I certainly might have said I would have believed it and if asked, you know, I would have said I would hope they would one day admit it. A prediction that they would would be more optimistic than I felt I had been.

Q Paragraph five, "So he began his lonely pilgrimage, making enemies, gathering ink, refining his theories."

A That's colorful. The pilgrimage was not lonely. We were making enemies, but we were also making friends.

Q Okay.

A Not ones I have dinner with regularly or not ones we invite home to dinner regularly, but I would have difficulty counting the number of people that I would regard as being friends.

Q But you did make enemies?

A I think so, but in the case of Roy I_{hhis} , for example, this is dubious. I think Roy

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Innis regarded me as an asset.
               I'm not asking about Innis. I'm asking
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 shout the truth of the statement that you made
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 enemies.
               Yes, I think so. If I were to name
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 specifically who they were, I would have some
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 trouble.
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               And you gathered some ink?
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               What does that mean?
       A
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               I assume newsprint.
               In that case, yes, I gathered some of
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               And you refined your theories?
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  it.
               I did some theoretical work, yes.
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       Q
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       A
               That's not one of the more objectionable
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       Q
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       A
               Paragraph six, "In time, he became old
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  ones.
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       Q
               Well, that's the only case I know of in
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  hat."
 Which I became or was considered to become old hat.
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               That is not a very -- I don't have a
  It's out of date, so to speak.
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               "'There goes Shockley, said the critics,
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  very strong reaction on that.
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        Q
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intellectual racist.' He should have stuck with the field he knew best - engineering."

I'm not aware of how that comes about. 2 giving one the title here which says intellectual A I think that has been printed somewhere. that Shockley is an intellectual racist. I don't have so strong an objection to that one.

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"And whenever it appeared he was finally Q fading form the scene, he would come up with a refinement, a new wrinkle, another argument, and because he is a Nobel laureate, he was always seriously evaluated - even though his theories were outside his field."

Well, that implies motivations there A that I don't agree with. As you say, "come up with a new refinement," being challenged by Roy Innis is not an act of mine.

That was one of the major effects of producing more publicity. I have some things of the very same sort to say in respect to the sperm bank situation, which is another example he gives in this.

I don't agree with the sentence that "he was always seriously evaluated." That is certainly hot true of some of the geneticists at Stanford when

I first proposed my improvement on the Hardy Weinberg Law, this new bit of science I developed in this area.

I would say it's a paragraph of low accuracy and is intended to paint a derogatory portrait of me. It does have at least two things that I regard as essential errors of fact.

"Whenever it appeared he was finally fading from the scene, he would come up with a refinement": I'm not sure I was fading from the scene when Innis came up and that certainly gave more impact and it certainly is not true that I was always seriously evaluated. I can document that from the material you have.

Q If I may be permitted my own editorial opinion, I think that was a compliment.

A That I was seriously evaluated?

Yes, sir, but that is neither here nor there. My editorial opinion means nothing.

A My complaint is that people have not taken me seriously, you see?

"And now he is back." This is Paragraph

hine. It says, "He has refined his ideas and carried

through to develop The Plan. And he launched his

latest proposals by participating in another media

event: donating his 70-year-old sperm to a special event: donating his 70-year-old sperm to a special sperm bank which will supposedly generate gifted kids from brilliant parents. He knows he is not the best of donors. At his age, sperm deteriorates gentically and the risk of defects increases."

A Well, point one, The Plan would seem to imply something very specific, which is not defined. The Shockley program later on was -- this certainly implies that maybe the voluntary sterilization bonus plan was the main aspect of The Plan. I don't buy that as being an accurate description.

Q You object to the capitalization?

A I object to the capitalization and The Plan being such a key thing as it's introduced there and it comes in at a later paragraph and it seems to say that he is obsessed with The Plan.

Q Don't you capitalize it yourself, VSBP?

A Yes, as an acronym. If he said he had refined The Plan, that would be like my VSBP, and "he launched his latest proposals by participating in another media event," is false.

Q That was not one of the most widely covered stories?

A It was not launched by my participating in another media event, the donation to the sperm

bank. I donated twice to the sperm bank.

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In the first case, there was no publicity about it at all. I donated a second time and there was no publicity at that time until the enterprising investigative reporter, Ed Schene, came along, a very honorable reporter. That is not my own evaluation alone, but also applies to the people that were involved in the identical twin studies in Minnesota. I did not donate or didn't use this donation to produce a media event.

It was when I was flatly called up and asked by a news reporter, "Are you one of the donors," this having previously covered maybe 20 or 25 or so of the laureates, I said, "No comment." It was a statement that I realized, as soon as I said it, probably conveyed what would be obvious.

That is, that you had? Q

That is what I thought he had concluded and it was a remarkably decent treatment on this because he said, "Well" -- he wasn't prepared to Preface it with "Shockley indicates he had" or something like that unless he had my approval of it.

He said, "I won't attribute this to you

unless you agree to it."

I said, "I will think this over."

thought it over.

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One of the points he made, which did not appear in the story, was that this would make or give the story a lot more impact. Robert Graham hoped I would not identify myself, but Loeb said to go shead.

- You checked with Mr. Loeb? Q
- I checked with Mr. Loeb. A
- Got his advice? Q
- Got his advice, yes. He said, "Sure, go A ahead."

My legal counsel in Washington, I think. was very dubious about it.

Another important news contact I had, which I will leave unidentified, thought it was somewhat dubious. I thought it over, decided this would contribute to the general aims I had and to the aims Graham had and I said, "I'm prepared to be identified, but I want my position to be clearly expressed on this."

Mr. Schene said, "Of course, I don't have control over what my editors will let me print." This resulted in about three or four phone calls, his checking with the editor and the statement which I expressed is contained in one of the documents you

have.

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In the news article that he wrote?

Yes.

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He accurately did express that? Q

He accurately did what we agreed to do. A

It did, in fact, did it not, and it's Q

reflected by all the other documentation, create a

huge media event?

It did create a media event. I would say it was not my purpose in making the donations to create a media event, but when it was going to occur, it was my purpose to try to make this media event as effective in terms of the general objectives I have in bringing public opinion to bear on these questions and to stimulate public attention to act in such a way that somehow, hopefully, in the end, it will provoke the scientific community and the National Academy of Sciences to take seriously the responsibility I have clearly been so derelict about. but this misrepresents that by saying, "He did this for the purpose of lauching a media event."

That is plain not true. "He knows he is hot the best of donors. At his age, sperm deteriorates genetically and the risk of defects increases."

I did not know that at the time of

making the donation.

I subsequently investigated this and, so far as I can make out, the evidence that this happens with sperm is very small and very slight and only within the last few weeks, in talking -- I talked to a doctor who -- a friend of mine who had, when this first came up, perhaps in connection with the Playboy interview -- well, that was probably still in process, but I asked him about this.

I think Syl Jones raised this question about sperm deterioration and this doctor pointed out that sperm and ova are different. All the ova are developed when the girl baby is born. Sperm is continuously being produced, so it doesn't have the same chance of deteriorating.

I gave a reference among the latest tound of subsequent answers to the first interrogatories, gave a reference to a paper which originated from a researcher in Atlanta pointing out how he found negative effects.

Q The <u>Playboy</u> interview, Mr. Jones' article, whom you have cited as having dealt with, cites evidence to the contrary?

A You will find that most of the <u>Playboy</u>

article was quite accurate, but the first page or

so I had no chance to edit.

Contrary to Playboy's practices, I did

the first page or so. The first pages

inaccurate compared to the tape. They also got

the first pages inaccurate compared to the tape. They also got

goofed up on what chromosome is involved in

mongolism. I did complain to Playboy.

Q Is it fair to say there is debate on that point?

A Not in my mind.

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Well, do you have any evidence or any belief that -- any evidence, I should say, that Mr. Witherspoon believed this not to be true when he wrote it?

recollection he said the same thing applied to horses. I don't remember having checked that recently. I talked to one man, at least, who is involved in some horse breeding and I think the stud fees do not go down with age.

Q I suggest that he mentioned, in his conversation with you, that he believed that to be the case?

As I recall, he made this as a pretty positive statement to me. I'm not sure I knew as much then as I do now. I perhaps did not react

ss strongly as I am reacting now.

Of course, there is a tape recording Q existing of that?

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That's right, of which you have a copy. A

Paragraph ten, "But he didn't donate for Q the kids. He donated for the publicity. The idea, he said, 'is to get the whole area of discussion out from under the rug and into the area of objective discussion. "

Well, "he didn't donate for the kids, he A donated for the publicity," that is in keeping with what I said about Paragraph 9. My purpose in donating in the first place is I thought Graham had a good idea because my statement, as quoted in item -the statement Ed Schene wrote was that I was in sympathy with Graham's idea to increase the probability of producing people at the top.

I think Graham says it, you know, that he would like to feel he had doubled or tripled the number of offspring of the present crop of Nobel laureates in science. I think that is certainly unobjectionable.

The main effect the Graham program will have is that it may bring a more objective look to these things.

It wasn't that I didn't donate for the kids, but I donated primarily to support Graham's program, who had been supportive of me in various ways and I didn't donate for the publicity. made perfectly clear in respect to Paragraph 9.

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Those two sentences are -- the first one is misleading. I certainly did not -- if I had thought there were any genetic defects on my part that were bad to transmit, I would not have donated.

The idea of getting the whole area into discussion occurred well after the donations and when the newpapers got into it. The sequence there misrepresents my position.

Is there any evidence that Mr. Witherspoon believed otherwise when he wrote this?

I would have to check the taping on this I think -- well, I think what happened was this, that when he asked me about this, I insisted on reading to him the statement that Ed Schene published and that, I think presents my position in a way which is quite inconsistent with this.

Which includes the premise that you're acknowledging your donation to this, but when you were acknowledging the donation to Ed Schene in the Los Angeles Times, that was to draw attention and to

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generate discussion? That part, yes, I think that was This would be more constructive to do this. I might remark that, afterwards, Graham changed his own position.

He was glad I had donated because otherwise he would be in the embarrassing position when Mr. Schene said he had not been able to find any Nobel laureates that agreed to this. I'm convinced, when Graham said he had a total of three, that that was indeed the truth.

He did not have a total of three?

I believe he did have a total of three. I don't question Graham's integrity on a matter of this sort.

Graham, I think, told Schene he had three Nobel laureates who donated. Mr. Schene questioned all totaled something like 20 or the 22 Nobel laureates who were in California, and two of them he was unable to reach.

How many verified other than you? Q I was the only one. What the other ones A said is not precisely stored in my mind, but some, I think, said they never remembered having been approached. That could be perfectly true in some

cases.

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I would doubt it would be true in the case of anyone who donated, however.

Approached by Schene? Q

Approached by Graham. Schene asked them A were they ever approached by Graham.

Schene asked that? Q

Graham had been, since 1965 -- the Yes. Anyway, Graham's story broke in story broke when? about 1978 or '79.

The Schene story? 0

The Graham story. It broke in 1980, I'm sorry, because it broke during the period when the Playboy interview was in progress, so I had had contacts with Graham since 1975.

He was thinking of doing this then and asked me about participating in it and I exhibited some sympathy, but no commitment.

So when did you participate? Q

It was sometime earlier than 1980. not sure I can even find those dates. I could probably find it if I looked.

I would have to look at my travel \$chedule. If I could look at my airplane tickets, I could find the time when I made a side trip on a

return from someplace to San Diego, which was the first donation.

The second one might be more difficult for me to determine because we met in Northern California.

Q I didn't understand what you were saying earlier about Graham saying that some did not remember being approached.

A Graham didn't say they didn't remember being approached, but Schene said some of the Nobel laureates did not remember being approached by Graham.

Q Okay, I understand.

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A I think it's quite possible that if they had no sympathy with this and called up and asked, they would remember it afterwards. I would think if they had donated, they would remember it.

Q Paragraph eleven, "William Shockey is obsessed with The Plan."

A "The Plan" has not been defined. This, again, is a gratuitous characterization of my Personality.

Paragraph twelve. "He is convinced he is thunned."

A "He is convinced he is right"; I might make it a little bit weaker. I might say he is very strongly of the opinion he is right, but the plan is so broad that, on some things, I'm much more convinced than I am about other things. That is awfully broad.

The statement, "does not understand why he is vilified and shunned, why a man endeavoring to save society is so unloved," I don't remember having had complaints or expressed anything about worrying about being so unloved. I hadn't thought of my position in that situation.

As far as understanding this, I have found what I think is an explanation which satisfies me in respect to many members of the academic community about whose nobility or motive and integrity I have no doubts about. This I have written up in various other places.

It's appeared in The Humanist and is entitled The Apple of God's Eye.

Not, to understand how persons subscribing to the principle of academic freedom and the First Amendment of the Constitution do not allow debate or rational discourse to take place in the academic environment;

is that a mystery to you?

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Not entirely on this. One aspect of it 2 is certainly humanitarian and it has very mixed 3 implications; that is, the feeling of what I have to say will profoundly distress the black minority. That was one of the very -- the aspect of that was one of the very satisfactory and rewarding experiences I had with the California Federation of Black Leadership because I came out, in the course of this, frankly stating my inescapable opinion or inescapable belief which I think I have recited and. if not, I had better recite it again, but that my research leaves me inescapably to believe that the major cause of the American negro's intellectual and social deficit is hereditary and racially genetic in origin and thus not remediable to a major degree by practical improvement in environment and now, since this has occurred, this has occurred at a time when we were taking the new attitudes towards the situation and I want to put on the record that these are matters that I regard with deadly seriousness and, furthermore, I regard the failure of the American intellectual community to face it as being quite at the same level as I regard the intellectual responsibility of Nazi intellectuals in Hitler's day

and I used this quotation from Spear to express my opinion.

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I want to say also I find, in some of these matters, there are certainly logical contributions that come up and in talking to an audience, I may be amused by these because one is amused sometimes by logical contributions, just as we were laughing lightly a few minutes ago on this matter and the incidental things that are happening here that are not pertinent to the main issue. That is characteristic of people of good intelligence, that they might find some very amusing things in very devastating and tragic situations.

This probably has real psychological values in adjusting. Is that enough philosophy to end up with?

MR. ADAMSON: Dr. Shockley, I think so. We will adjourn and reconvene tomorrow morning at 9:30.

(Deposition suspended.)

WILLIAM SHOCKLEY

Sworn to and subscribed before me this _____ day of _____, 1982.

My commission expires_____.